DOCUMENT RESUME

ED 320 890 SP 032 445

AUTHOR Schwartz, Henrietta S., Ed.; And Others
TITLE Collaboration: Building Common Agendas. Teacher Education Monograph No. 10.
INSTITUTION American Association of Colleges for Teacher Education, Washington, D.C.; ERIC Clearinghouse on Teacher Education, Washington, D.C.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO ISBN-09333-065-5
PUB DATE Feb 90
CONTRACT RI88062015
NOTE 253p.; Papers presented at the Annual Meeting of the American Association of Colleges for Teacher Education (Anaheim, CA, March 2-5, 1989).
AVAILABLE FROM ERIC Clearinghouse on Teacher Education, One Dupont Circle, NW, Suite 610, Washington, DC 20036 ($20.00).
PUB TYPE Collected Works - Conference Proceedings (021) -- Information Analyses - ERIC Information Analysis Products (071)

EDRS PRICE MF01/PC11 Plus Postage.
DESCRIPTORS *Agency Cooperation; *College School Cooperation; *Cooperative Learning; Elementary Secondary Education; Higher Education; *Institutional Mission; Minority Group Teachers; *Needs Assessment; Preservice Teacher Education; Teacher Recruitment

ABSTRACT

This book offers a collection of papers from a conference focused on various aspects of school/college collaboration, edited so as to form a coherent presentation. The papers are grouped into five chapters, each with its own theme. Chapter 1, on the nature of collaboration, aims to promote inquiry into research, theory, and application concerning the nature of collaboration and the necessary conditions for successful partnerships. This chapter also contains a speech by former Education Secretary Terrel H. Bell and a summary of a symposium on cooperative learning. Chapter 2, on implementation strategies, contains discussions on general lessons to be drawn from successful programs and those programs' characteristics, and on the re-emerging importance given to teacher preparation. Chapter 3, on role relationships/leadership, considers the coming educational challenges presented by demographic trends; the changing roles and responsibilities of university, school, and union personnel working in collaboration; and the nature of leadership. Chapter 4, on context variables, focuses on the factors influencing the outcome of a collaborative project. Finally, chapter 5, on collaborative models, presents reports on different in-place programs. A featured symposium assessing current issues in educational reform and the requirements of effective collaboration conclude the document. (JD)

ED320890

COLLABORATION: BUILDING COMMON AGENDAS

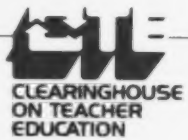
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Henrietta S. Schwartz
Senior Editor



BEST COPY AVAILABLE

COLLABORATION: BUILDING COMMON AGENDAS

Henrietta S. Schwartz
Editor

Published by

CLEARINGHOUSE
ON TEACHER
EDUCATION

and

American Association of Colleges for Teacher Education
One Dupont Circle, NW, Suite 610, Washington, DC
20036

February 1990

CITE AS:
Schwartz, Henrietta S. (Ed.)(1990). *Collaboration: Building Common Agendas* (Teacher Education Monograph No. 10).
Washington, DC: ERIC Clearinghouse on Teacher Education.

MANUSCRIPTS:
The ERIC Clearinghouse on Teacher Education invites individuals to submit proposals for writing monographs for the Teacher Education Monograph Series. Proposals should include:

1. A detailed manuscript proposal of not more than five pages.
2. A vita.
3. A writing sample.

ORDERS:
ERIC CLEARINGHOUSE ON TEACHER EDUCATION
One Dupont Circle, NW, Suite 610
Washington, DC 20036
(202) 293-2450

Library of Congress Catalog Card Number: 90-80518

ISBN: 09333-065-5

Series Editor: Mary E. Dilworth
Volume Editor: Henrietta S. Schwartz

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education under contract number RI88062015. The opinions expressed in this report do not necessarily reflect the positions or policies of OERI or DOE.

Foreword

David G. Imig
Executive Director
American Association of Colleges for Teacher Education

The selection of the 1989 American Association of Colleges for Teacher Education Annual Meeting theme was made by AACTE's president, Eugene E. Eubanks. He choose Collaboration: Building Common Educational Agendas because of both his personal experience with such efforts and his firm belief that schools and colleges must work together to address the myriad of challenges facing both institutions. While Eubanks' experience and concern focussed on urban school/college partnerships, he urged all members of the Association to consider cooperative relationships for the purpose of enhancing the profession. While recognizing that virtually all colleges and universities have forms of cooperative arrangements with local public schools, Eubanks suggested that the time was appropriate to consider anew these arrangements. He urged that 1988-89 be a time for such examination.

Dr. Eubanks has demonstrated through personal experience in the Kansas City (Missouri) public schools appropriate ways that schools and colleges work together. His deep involvement in the desegregation efforts of the Federal District Court and the Kansas City School Board provided him with intimate knowledge of how college faculty and administrators can serve the interests of the communities in which they teach. Eubanks' concerns for the disadvantaged youngsters of that community caused him to devote time and energy to school reform while serving as a university administrator. He would have other university administrators and faculty become similarly involved in the public schools of their community. It was for that reason that he wanted AACTE member institutions to "stretch" beyond the ordinary school/college connections to consider the benefits when schools and colleges work together.

Dr. Eubanks invited Henrietta Schwartz, Dean of the School of Education at San Francisco State University, to chair his Annual Planning Committee. His charge to Dr. Schwartz was to convene a group of talented individuals to plan the best possible AACTE Annual Meeting and to have the conference focus on the challenges of school/college partnerships. Dr. Schwartz did so and the AACTE Annual Meeting in Anaheim was a formidable gathering of scholars and practitioners who considered the theme of collaboration. The series of seminars and presentations was significant in that they involved both teachers and teacher

educators. Robert Slavin, Donald Stewart, Bill Honig, Terrel Bell, Al Shanker, W. Ann Reynolds, Ann Lieberman, and John Goodlad were featured speakers; it was the myriad of small working sessions, however, that provided practical lessons for building school/college partnerships.

Now, Dr. Schwartz has gathered together the papers presented in Anaheim and, together with some members of her planning committee, has edited them into a coherent presentation on particular aspects of collaboration. As you read the following volume, you will be impressed by the quality of their efforts and the comprehensiveness of the presentations. As others move to document existing school/college partnerships or fashion similar conferences, this volume of papers will serve as an essential source of information. AACTE is indebted to Dr. Schwartz and her colleagues for their efforts on behalf of the Association. The meeting they planned was exceptional; this volume of papers is outstanding!

Table of Contents

Foreword ..... *iii*
David G. Imig

Introduction 1
Henrietta S. Schwartz

Presidental Address 4
Eugene Eubanks

Chapter One: The Nature of Collaboration 11
George Olson, editor

Featured Speech: Quitters and Teacher Turnovers: An albatross on the back of our economy 16
Terrel H. Bell

Featured Symposium: Cooperative Learning: Kids helping kids, teachers helping teachers 21
Robert Slavin

Selected Papers

Teacher empowerment and collaborative mentoring partnerships: An empirical assessment 28
E. Dean Butler

The meaning of collaboration implementation 30
George E. Burns and Aubrey Smith

Bringing teacher education to remote Northern Canadian Centres: The AHCOTE story 32
A.J. Dawson and Finola Finlay

Professional development schools--a collaborative effort 34
James McLoughlin

Enhancing minority recruitment and retention: Collaborative strategies linking university, public schools, and business 36
Barbara Simmons

Collaboration with arts and science: Instructional enhancement partnership 39
Mary Jan Bancroft and Stephen Lafer

Reflections of an experienced collaborator 41
Thomas M. McGowan

Summary 48

Chapter Two: Implementation Strategies: Policies and Procedures 49
Fannie Wiley Preston, editor

Featured Speaker: Peggy Pedagog Prevails 54
W. Ann Reynolds

Selected Papers

Transforming the knowledge base into teacher education programs 60
Henrietta Barnes

The academic major for elementary education students:
A collaborative project between faculty in education and arts and sciences at the University of Delaware 64
Frank B. Murray

A model for optimizing the benefits of collaboration 68
Raymond G. Taylor, Robert T. Williams, and Richard Card

The university high school: An early intervention collaboration from 'scratch' 76
John L. Brown and James D. Greenberg

Assessing and changing a troubled high school 78
W. Robert Houston, Prentice Baptiste, Jane McCarthy, Allen R. Warner, and Teddy McDavid

Inservice for teachers: A case study in policy and procedures for successful collaboration 81
James Binko and Gail Hobbs

Summary 83

Chapter Three: Role Relationships/Leadership 85
Helen Greene, editor

Featured Speaker: School/College Collaboration in a Multicultural Environment 88
Donald Stewart

Featured Symposium: Changing Roles and Responsibilities: University, school, and union 91
Ann Lieberman and Mary Negben

Selected Papers

The joint committee on university affairs: A study in success 103
Philip Rusche, Lola Glover, Christopher Ellis, and Helen Cooks

Partnerships in teaching critical thinking 105
Mary Diez

Teacher/professor/administrator empowerment: A driving force for professional development school collaboratives 107
Roger S. Pankratz, Carl Martray, and Sarah Laws

Teacher education which promotes the merger of regular and special education: Challenges and opportunities 115
Mara Sapon-Shevin

Summary 124

Chapter Four: Context Variables 125
Karolyn J. Snyder and Robert H. Anderson, editors

Featured Speaker: Revitalizing teacher education programs 129
Bill Honig

Featured Symposium: Improving education through school/university collaborative efforts 133
Helen Greene, Donald J. Behnke, E. Tom Givigne, David Splitek, Robert J. Krajewski, and John Sikula

Selected Papers

Cooperation starts inside schools of education: Teacher educators as collaborators 138
John C. Fischetti and Elizabeth Aaronsohn

The collaborative consultation support system: CSD #24's Peer Coaching Project 145
John B. Poster

School/university collaboration: The need for a common language and shared vision 150
Judith A. Ponticell

Summary 154

Chapter Five: Model Programs 155
Henrietta S. Schwartz, John J. Lynch, and Thomas Carson, editors

Featured Speaker: Collaboration: process, substance, and humility 158
Albert Shanker

Featured Symposium: School and university collaboration 163
Ann Lieberman, Rhonda Weinstein, and Sidney Trubowitz

Selected Papers

Creative partnerships: Models for arts education 168
August Coppola

Seeking excellence from preservice to induction: Public schools, state department, and university collaboration 175
Betty Greathouse, Gladys Styles Johnston, Billie Enz, Gary Anderson, and Nelson Noggle

Developing a national database for preservice teacher education 189
William E. Loadman, Sarah M. Brookhart, and Donald J. Freeman

Project linkage: School/University collaboration in the development of a Masters degree program for inner-city teachers 199
Malcolm Friedman

Collaboration and reflectivity: Cornerstones of a teacher education program 206
Nancy L. Quisenberry, John McIntyre, and David M. Byrd

Aerospace scientists and engineers emerging as mathematics/science teachers: A collaborative model program 214
Fredricka K. Reisman

Summary 222

Chapter Six: Concluding Remarks 223
Henrietta S. Schwartz

Featured Symposium: Froth, Tinsel, and Substance in Teacher Education 224
Louis Rubin, John Goodlad, Lee Schulman, and Ralph Tyler

Summary and Final Remarks 241

Contributing Editors

Robert H. Anderson
President, Pedamorphosis

Thomas Carson
San Francisco State University

Helen Greene
Dean, School of Education
Long Island University

John J. Lynch
Associate Dean for Administrative Affairs
School of Education
San Francisco State University

George Olson
Dean, School of Education
Roosevelt University

Fannie Wiley Preston
Associate Dean for Academic Affairs
School of Education
San Francisco State University

Karolyn J. Snyder
Director, School Management Institute
University of South Florida

Introduction
Building Collaboration: An Overview

Henrietta S. Schwartz

The partnership, or collaboration, movement started on university campuses 30 years ago. Though the first 20 years of this movement could be classified as a "top down" involvement of universities and schools, more recent initiatives result from interactions among faculty and administrators of both agencies on the front lines, a kind of grassroots initiative. Today, academic policy makers, faculty, and practitioners need to systematize lessons learned on the front lines in order to realize possibilities and determine what kinds of collaborative activities are most apt to be beneficial to all parties. For this reason, AACTE President Eugene Eubanks saw a need to elevate the status of this important movement in teacher education and on campuses to give those engaged in partnerships and collaborative programs an opportunity to share their experiences. Therefore, he charged the Planning Committee to develop a national conference and to put the appropriate intellectual framework around collaborative efforts. That is what happened in Anaheim, California, in 1989. The theme of last year's conference, Collaboration: Building Common Educational Agendas, is the focus of this work and features the fine speeches, stimulating sessions, and selected presentations from the 1989 Annual Meeting.

Collaboration and partnerships are buzzwords that cover many diverse activities. So, when we sent out the call for papers and presentations, the Planning Committee defined collaboration as characterizing those efforts that feature parity among the cooperating agencies in governance and resource allocation, use negotiation as a chief problem-solving process for the program, and have lots of liaison roles at all levels of the university/school partnership. Collaboration means having common agendas, sharing power and status, and building consensus; these require commitment and more give than take on the part of all parties. The Conference subthemes and these proceedings delve into the nature of collaboration; policies and procedures to manage its implementation; leadership and communication styles that help make it work; and the many context variables that affect its success. Research, theory, and practice are emphasized throughout. The model program descriptions, in particular, demonstrate how theory is translated into practice and how research on the practical applications of collaboration informs theory.

The reader will find this publication to contain the speeches of Terrel H. Bell, Donald Stewart, Bill Honig, W. Ann Reynolds, Albert Shanker, and last year's AACTE President Eugene Eubanks. Along with the selected papers, there are summaries of the major symposia and descriptions of sessions with multiple and individual speakers. Each of the contributing editors introduces a chapter with

thoughtful commentary and provides a summary of the major factors in one of the themes of collaboration. An analysis of the material will show that collaborative programs and research about partnerships reveal common elements. Briefly, productive collaborative efforts have:

- A common agenda acknowledged by the major parties;
- A small group of activists;
- Some small-scale beginning activities;
- A large measure of flexibility;
- A desire to learn from mistakes;
- A focus on activities, not machinery;
- Rewards and status for those truly involved; and
- A great deal of comfort with ambiguity.

It also helps to have intelligent, dynamic, facilitative, and likable leadership. The benefits from this sometimes difficult process are remarkable and long-term.

The common agenda for reform through collaboration can trace its roots to the reform movement of the 1980s which began with *A Nation at Risk* (1983). Reforming schools and teacher education was necessary for many pressing reasons--to keep our youth from "drowning in a rising tide of mediocrity," to maintain our competitive edge in international competition and produce the literate work force we need for the 21st century, to break the cycles of poverty and despair in inner city communities--but it was also necessary because building better schools and preparing better teachers was the right thing to do. It still is. The reality is that no single organization or social institution can do the restructuring, the massive change that is called for, in isolation. No single actor in our complex interconnected society and agencies can do the job alone. Survival as a nation, as an institution, and as an individual requires cooperation and trust, energy and vision, resources and long-term commitment. As President Eugene Eubanks said in his challenging address, "We have much to learn about partnerships and collaboration, lessons that I believe we must learn for our survival."

The benefits to be derived from collaboration are many, the most important of which is the professionalization of teaching. The collaboration being called for in the national news and in many of the papers in this volume concerns the need that teachers, administrators, and other education professionals (and that university faculty', administrators', and teachers' organizations), assess and establish a leading role in the national agenda of educational reform. But not in isolation. It requires the collaborative efforts of practitioners, scholars, state and federal agencies, and all the stakeholders in education.

This volume reflects the work of many people. It is their hope and mine that conference participants and members of the audience will use the ideas and knowledge captured in these pages. Several of the selections point out the external constraints on collaborative attempts by university and school people to implement new programs and joint practices. The faint of heart may be intimidated and leave the knotty, unresolved issues to others or to the future. But the

risk-taking dean, principal, teacher, faculty member, university president, and university chancellor involved in such efforts, by demonstrating their willingness to rock the boat of reluctant participants, can make all the difference.

Teacher educators cannot run the risk of becoming endangered species. To survive, collaborative efforts and alliances must be formed with other members of the education profession. These pages provide some insights as to how to get the job done. The insights are collected together under the conference themes, which are organized into the chapters of this monograph.

Chapter One's theme is the nature of collaboration. The editor for this section was George Olson. This chapter's aim is to promote inquiry into research, theory, and application concerning the nature of collaboration and the necessary conditions for successful partnerships. Also featured in this section are Terrel H. Bell's speech and a summary of the first symposium concerning the topic of cooperative learning.

What general lessons can be drawn from successful programs and what are the programs' specific characteristics? Some answers to these questions are found in Chapter Two, edited by Fannie Wiley Preston. The remarks of W. Ann Reynolds, Chancellor of the California State University, concerning the reemerging importance given to teacher preparation are also highlighted in this chapter.

Chapter Three features Donald Stewart's speech on upcoming educational challenges presented by demographic trends and the Ann Lieberman-Mary Negben symposium on changing roles and responsibilities of university, school, and union personnel working in collaboration. Helen Greene has brought together summaries of these events with papers addressing the nature of leadership and individual behavior of collaborating participants.

Collaborations that fail are as instructive as successful ventures. The different factors influencing a project's outcome is the focus of Chapter Four. Editors Robert H. Anderson and Karolyn J. Snyder have summarized the symposium identified with this theme and present several papers concerning context variables. Also included here is the speech given by Bill Honig, Superintendent of Public Instruction for the State of California.

A majority of the conference presentations reported on different in-place programs and are represented in Chapter Five. University/school collaboration make up the largest portion of these programs, and the symposium in the chapter discusses three such partnerships. The speech given by Albert Shanker, President of the American Federation of Teachers, is also found here. Henrietta Schwartz, John J. Lynch, and Thomas Carson were the editors for this chapter.

The concluding remarks, Chapter Six, feature the final symposium of the conference, "Froth, Tinsel, and Substance in Teacher Education." The remarks given by Louis Rubin, Lee Schulman, John Goodlad, and Ralph Tyler serve as an assessment of current issues in educational reform and an all-round conclusion of the 1989 AACTE Annual Conference.

Presidential Address

Eugene Eubanks
1989 President
American Association of Colleges for Teacher Education

My colleagues, it has been an honor serving as President of AACTE this year. This year's experience has brought me a host of new friends and colleagues. If anything, I have learned to appreciate the strength and potential within the membership of AACTE and its networks. I am convinced that . . . we have the talent, intelligence, and knowledge in collaboration with others to meet the challenge of transforming schooling in America, not only to meet the intellectual demands of a technical, information based-culture, but to provide an education that is freeing and empowering to all of our citizens, young, old, and culturally diverse. What I am not yet convinced of is whether or not we will reach our potential. Will we have the vision, courage, and persistence to risk what has to be risked in order to build that **transformed schooling?**

My reservations come in part from this year's experience. This year has taught me both our hopes, and our limitations. It is the limitations that we must face.

Traditionally, the speech of the outgoing president is reflective of the year's activities--full of nostalgia as we discuss our accomplishments and our limits to the accomplishments that we have had building partnerships and fostering collaboration this year. Let me say in the beginning, as I will repeat at the end, I think we must very seriously consider a vehicle for AACTE that allows us to develop a multi-year ongoing mission or purpose. Such a mission would be in addition to the special focus each president brings to his or her term. Without such a vehicle we risk fragmenting our efforts or not allowing enough time for a substantial or critical mission to make an impact. We have some themes that attempt such a process; education that is multicultural, the knowledge base for beginning teachers, education of educators, etc. I suggest we need to have at least a three-year mission focus. We need to arrive at consensus concerning that mission. I would suggest that restructuring schooling for equitable outcomes for all learners, including higher education, might be one worth considering. To quote the old Star Trek introduction, we must begin "a ten year voyage into the void to chart the unknown." While such a voyage may be unknown, it is not unknowable.

Last year, we identified three areas around which we wished to develop and build collaborative networks and relationships as part of this year's work. I would like to review them with you, give you a progress report, and include some of the new and ongoing collaborative network activities developed this year as part of AACTE structure. It is a mixture of good news and less-than-good news.

A closer look at and study of collaboration between schools and colleges of education and public and private elementary and secondary schools was to be a major thrust of our collaborative effort this year. The major work done on that effort under the most able leadership of Henrietta Schwartz and excellent staff work by Ann O'Brien, are the presentations and colloquia about this issue we are witnessing here this week. There have been some outstanding presentations and we have gained some useful information and new understandings as a result. However, we also realized how far we have to go. We have made only a very tentative beginning. What strikes me as a lesson to be relearned again and again is that collaboration between organizations, or persons for that matter, must be based upon developing a common purpose or mission if there is to be any real chance of effective outcomes. Common missions among collaborators have as their underlying foundation a relationship of trust, and therefore the ability to risk.

My perception of the existing conditions is that we still have a long way to go before such common purposes and missions are adequately developed between schools and colleges of education and elementary and secondary schools. In fact, there may be little evidence that, except for a very few, anyone is really putting the kind of effort and energy needed to produce a restructured relationship with schools and schools of education. I do not know how long we have (how long the culture will give us) to develop such collaborative relationships. My best judgment is that we do not have more than a decade to develop them:

It seems to me that at an ever increasing pace, the American culture, through its political structure, is indicating that an excellent education for all children is the expectation and demand, whether or not the culture chooses to pay for it. There seems to be an ever increasing understanding that equity and excellence in schooling is an outcome, not an input. Collaterally, public schools and schools of education particularly are being blamed for the present unacceptable schooling outcomes. Of these, schools and colleges of education are seen as most vulnerable and most expendable. The culture will not do without elementary and secondary schools. The culture may choose to do without schools and colleges of education, or at least some policy makers believe they are not necessary. Those of us in the teacher education and school leadership business had better form collaborations with schools around missions relating to successful learning for all children before the option to act is taken from us. This may put us in some cultural conflict with many of our home universities and colleges, but this is the lessor of the evils; or, perhaps, it is the evil of the lessors.

A difficult situation in the international education area occurred with AACTE this year. We found it necessary to disentangle ourselves from the Consortium of International Cooperation in Higher Education. A major stumbling block was

common mission and purpose. However, we have begun to develop a new international coalition, an example is the work ongoing and proposed with the United States/Japan Foundation. In consort with a number of association members we had a meeting in Osaka during the summer; others are in the works. We believe international education not only continues to be viable but has a real opportunity to blossom.

Additionally, AACTE has entered into a partnership with the College High School in the District of Columbia. The association is trying to include neighboring colleges and universities as well as the educational agencies located at One Dupont Circle in this effort. This is a beginning. School partnerships programs can develop trust. Out of trust will come willingness to risk, and out of willingness to risk will come common missions and purpose as well as restructured collaborative relationships. I personally will be anxious to watch how this beginning collaborative effort develops.

We had high hopes of fashioning a coalition that could work on urban schooling and schools of education. We had a series of conversations with the leaders of the Council of Great City Schools along with an invitational meeting sponsored by the Ford Foundation. This attempt at moving forward with the council has disappointingly not moved beyond the discussion stage as yet, although the Ford Foundation independently did fund 11 school/college partnerships to work on "Professional Development Schools." All 11 are in urban schools and are meeting in conjunction with our annual meeting to share their progress. AACTE staff are trying to begin talks with the Urban League in the hopes that additional collaboration relating to urban schooling can be developed. We have not been able to get this project very far as yet.

Let me say before I leave this point that I am persuaded that AACTE must somehow be more pro-active in facilitating the ability of its members to develop more collaborative relationships and structures with elementary and secondary schools. We must seek out the schools to work on this agenda; the provision of an excellent education for all children should be the focus of the collaborative mission. I leave that challenge with you.

The second area of collaboration and restructuring we indicated as being crucial was the area of changing teacher education programs. As I have listened this week, not only to presentations, but to many of you as we have talked, it is abundantly clear that many of us are in the throws of making significant changes in teacher preparation programs. Again, it seems important to me that we should seek to find a common knowledge base we have and proceed in an idiosyncratic manner. What might prove helpful to us all is a much higher level of collaboration among ourselves in sharing and agreeing upon what is and is not in the knowledge

base. AACTE members can be proud of our initial efforts in promoting a common understanding of the knowledge base. A major effort in that regard is the work of Bill Gardner and those who have worked with him. For example, the release of the handbook, *Knowledge Base for Beginning Teachers*, is due in large part to the editor Maynard Reynolds and his staff at the University of Minnesota. Many outstanding writers and researchers contributed chapters. Carol Smith and Marilyn Scannell of the AACTE staff deserve praise for their efforts at negotiating each step of the handbook development.

AACTE also has made other efforts to continue both to seek agreement concerning the knowledge base and to begin to disseminate the knowledge base information to member institutions Through the efforts of the Knowledge Base Committee and with substantial support from the Exxon Foundation, several promising efforts have occurred. Workshops were hosted by Butler University and the University of Colorado at Denver that were attended by faculty from across the country. Glassboro State College conducted a two week faculty development workshop. Part of the effort is the publication of Hendrik Gideonse's book relating knowledge base to teacher education. Finally, more than 30 university faculties are clustered around seven "lead" institutions to jointly explore the knowledge base.

The knowledge base is an important agenda. But we should remember that it is essentially a university agenda. The knowledge base may already exist in our laboratories, the elementary and secondary schools. We must understand, however, that the knowledge base only comes alive and has meaning when it gets translated into the language and practice of teachers, especially teachers and principals. The job of translation is more than developing teacher and administrator preparation programs and publishing in journals and books. It will do little good to train teachers and administrators in a knowledge base and then send them to schools whose practice is something else. We all know that the teacher and administrator culture is so powerful that within a very short time of practice, regardless of what the university training said, the reality of experience is the final teacher. The knowledge base cannot be something that schools of education have and school practitioners can find out about. The knowledge base must be something that we share and use together, if it is to ever be used. This means collaboration at all levels including the discovery and development of the knowledge base through its implementation into practice. If we want the assistance of school people at the back end implementation stage, we ignore them at the front end development state at our considerable peril. "We know, you find out" does not build trust and will not result in collaboration. I wonder how long we will have to keep learning this lesson before it becomes part of our knowledge base.

The third area we discussed last year is one that in my view is the most critical area facing education in this country. If we do not face it and respond, future generations in this country may have to be content with a second-class status among the world's nations. More and more people today are becoming interested in the demographics of the 21st century. Two of them have dramatic impact upon education, and they are somewhat interrelated. The two most compelling demographics may be the aging population and cultural diversity.

Let's look at these very briefly as they are already impacting schooling, schools, and schools of education. We are quickly becoming an aged nation. In the 1960s and 1970s the boomers said, "Never trust anyone over 40." By the turn of the century the same group will be saying, "Never trust anyone under 40." In 1960, in this country there were 17 people for every person on retirement. By 2010, if employment is full, there will be less than 3.0 persons working for every person on retirement. It presently takes a person on retirement 24-30 months to receive back an amount of money equal to what that person paid into social security. The average retiree will live another 14 years beyond that level. In 1985, for the first time in American history, there were more people over 65 than there were adolescents in America. That pattern remains true for at least the next 75 years. The lesson is clear. We need every young person working and at productive jobs. Jobs in the 21st century will require higher and higher levels of education to maintain a moderate standard of living. Will we be prepared?

Regardless of the confidence at the Census Bureau, it is not easy to get reliable data in this country regarding class, race, and ethnic group. One can assume a conservative interpretation of data will favor the majority culture. I say that without criticism or pejorative intent, it is simply a description of what is. Given this conservative data, what do we know? Right now the minority population represents around 30% of Americans. By the year 2000, 35% of the population will be minority. Somewhere in the final two or three decades of the 21st century, 51% of the US population will come from minority cultures. We are now and are becoming ever increasingly a diverse multicultural nation.

Seventy percent of the minority population lives in the largest 25 urban centers of this country. The poorest performing educational systems in this nation are in the 25 largest urban centers. The conservative data indicate that upwards of 40% of the children in urban school systems do not finish high school and another 40% are receiving an inferior, second-rate education. Seventy percent of our present teaching force is composed of white class females, 20% are white class males, and 10% are from minority cultures. Only 8-10% of those currently preparing to become teachers are from minority cultures.

If we consider just these two general pieces of futuristic data, some very obvious conclusions can be made. We must begin immediately to reform urban schooling and prepare teachers to become well qualified inner-city teachers. We must also build a multicultural teaching force to teach in these urban schools. These demographic data will not go away. Facts are stubborn things. We must understand that there are no other issues in education more critical to the survival of this nation as a first-class culture or as a free and democratic society than excellent urban schools and the development of a multicultural teaching force in the elementary, secondary, and higher education schools.

AACTE has done some excellent work in the area of minority teachers this year. Working within the Forum of Education Organization Leaders, using position statements and other data proposed by the committee on multicultural education, headed by Frank Brown and Len Beckum, AACTE was able to have that group of 11 education organizations focus one of their quarterly meeting on the topic of minority teachers. The Washington High Education Secretariat was involved in that meeting and it resulted in a task force on minority teachers, with our own David Imig as co-chair. We now have an agreement to work on this issue in a partnership mode with the Secretary of Education.

Using two documents with which AACTE was involved, the *Wingspread Proceedings* and *The Teacher Pipeline Report*, AACTE was provided with several leadership initiatives. One has been at the federal level; for example, the AACTE Government Relations Committee, headed by Dick Sagness, and assisted by the good work of Penny Earley, has worked with Chairman Augustus Hawkins and his committee to prepare for the introduction of a significant piece of legislation, intended to increase the participation in employment fields where certain populations are underrepresented. We have participated in seminars dealing with potential legislation in Washington and Los Angeles, and have worked on task forces and worked with members of the House Education Committee.

In other areas, Mary Dilworth is an advisor to the Phelps-Stokes Foundation and has participated in numerous forums at several universities and the Tomas Rivera Center on the issues of minority recruitment and retention. AACTE has received grants to work on minority teacher recruitment from Metropolitan Life Foundation, Ford Foundation, and the Exxon Education Foundation. Additionally, AACTE launched a Teacher Locator Service for the Ad Council's "Reach for the Power, Teach" campaign which is beginning to attract minority candidates to careers in teaching. Norfolk State University and the University of Kentucky co-sponsored with AACTE conferences on minority recruitment.

It is an impressive array of activities and collaborations for one year. We should all be proud of the effort that David Imig, the staff, and many member institutions

have played in this effort. I would like, however, to call your attention to an important fact concerning this year's effort toward developing a multicultural teaching force. They are all beginnings. They are first steps; important first steps, but first steps. In the language of the implementation and change literature, we are at awareness-information seeking levels of implementation. In the very near future, every school of college of education represented in AACTE, including all of us in this room tonight, must become actively involved with this issue. Not at the level of attending conferences and gaining more knowledge and developing understanding about the issue. Not by agreeing soberly and nodding our heads and saying, "We've got to do something about that." **We must act and do something now.** If we are wise, we will act together and collaborate. I think urban universities must take the lead in this for obvious reasons.

This brings me back to my opening remarks. The time may be past when we can be satisfied only with David and the staff doing an excellent job, at having an annual conference where we share with one another and provide a forum, for making available some solid research and information to its members. As important as those things are, and as much as we must keep doing this level of work, it may not be enough. We may have to come together through this organization and develop a common, long-term purpose, and be willing to share some of our fiscal and human resources to accomplish the outcomes we all say we want.

I wish to thank you for this year. It has been rewarding to me. I am sure I have gained far more than I have been able to give. Even though I have sought a new role and am no longer a chief institutional representative, I want you all to know that my commitment to AACTE and to many of you that I have come to know over the years is still very strong. In closing, let me repeat a line from Voltaire, "Appreciation is a wonderful thing: It makes what is excellent in others belong to us as well." I appreciate AACTE and look forward to our continued collaborative work together.

Chapter One
The Nature of Collaboration

George Olson, editor*

If collaboration was a new concept, it would be easier to define, to surround, to portray. It is a concept and practice that is so "human" as to characterize the human condition throughout history. The power of collaboration could be mankind's undoing, for it can and has been used effectively for gaining many ends. A great number of phrases and terms depict some form or aspect of collaboration, so many that we need merely to mention one and numerous others come to mind. Most often these are spoken within the context of reaching some goal, gaining power to facilitate some outcome, overcoming obstacles, or simply and basically trying to survive. Partnerships, coalitions, alliances, networks, consortia, and collaboratives are examples. These terms roll off our tongues so easily. They seem almost to be a part of us, and perhaps for that reason, objectifying one concept that is inclusive of what these various references represent is a bit of a challenge.

The AACTE 1989 Annual Meeting was devoted to the theme of collaboration, characterized in a broad sense as "Building Common Educational Agendas." One could legitimately ask, "Why?" For what purpose do we now need to focus our efforts on building common educational agendas? There is no mystery in the answer. It has become patently clear that the devaluing of education in this country has placed the nation in a precarious state, one in which our global influence, our competitiveness, and our ability to control our own destiny diminishes yearly. There seems to be an increasing rate of decay in the importance of social issues. Our seeming inability as a nation to focus priority on educating our youth belies a lack of common agendas when it comes to education, and we as educators must take the responsibility in bringing about that focus. Common educational agendas can only be built through developing and improving our ability to collaborate with

---

George Olson is beginning his fifth year as Dean of the College of Education of Roosevelt University in Chicago. Prior to this, he was Director of Roosevelt's Research and Development Center and during that time directed research in teacher stress in urban secondary schools, conducted statewide evaluations of Right to Read Programs throughout Illinois, and designed curricula for microcomputer applications in preschool and elementary classrooms. Current efforts have been focused upon the development of an Educational Partnership between Roosevelt University and selected secondary and elementary public schools in Chicago.

individuals and groups within our educational community and, more importantly, outside of that community. The latter is something with which we have not always had great success. This now appears, however, to be our mandate for survival.

AACTE president, Eugene E. Eubanks, posed the problem for the 1989 AACTE Annual Conference in terms of a crisis in professionalism.

> It is widely recognized and understood that if we are to professionalize teaching, then collaboration among government and public bodies, universities, schools, teacher organizations, and knowledgeable practitioners is required. The issue is how to effectively accomplish this most important function. I maintain that we have much to learn about partnerships and collaborations, lessons that I believe we must learn for our survival.

Collaboration for survival is a practice played out through the centuries and, yet, it has rarely been a simple or easy process. The guides, the steps, the rules, the manuals, and the tips for good collaboration will continue to fill our shelves and our computer storage media for as long as we are around. But with every human endeavor, these guides have relevance within a specific timeframe and social context and must be revisited and refined periodically to fit the changing circumstances. For this reason, it is fitting that a major subtheme for this conference be "The Nature of Collaboration." It is through a deeper understanding of its nature that we can improve our ability to collaborate.

In the invited presentations and the paper presentations for the 1989 Annual Conference, we see the nature of collaboration explored and depicted from the viewpoints of research, theory, and practice. Topically, four facets or subthemes of collaboration were identified from the paper presentations. First, case studies of successful collaborations reveal the ingredients of initiatives that have been successful, ones we can interpret and use for our own specific ends. Second, various presenters have theorized about collaboration, viewing it as a complex phenomenon, and providing insights into the interactiveness and connectedness of what appear to be universal aspects of collaboration. Shared incentives, experiencing multiple roles, and breaking isolation are offered in this context. Greater predictability is one goal of theory, a level of predictability that will stand the test of time. The meaning of collaboration in an operational sense was a third facet of collaboration and was depicted by presenters as a notion of sharing. Henrietta Schwartz, Chair of the 1989 Annual Meeting Planning Committee, captured this notion nicely in her definition of collaboration for this conference. "Collaboration, we decided, means having common agendas, sharing power and status, and building consensus; these require commitment and more give than

take on the part of all parties." Sharing must include giving, and it may be the giving that makes collaboration possible. The most important aspect of collaboration, that which gives collaboration meaning, may be the act of giving. The fourth facet represented by the presentations is the assessment of collaboration, and by this is meant the identification and inclusion of those parts and pieces which must be included, not overlooked, i.e., accounted for if collaboration is to be successful. Who must be included, how must they be treated, what are the role responsibilities, and what are their goals? A collaboration may succeed or fail based upon the assessment of such factors.

These by no means include all facets of collaboration, but are stimulants to our thinking and further deliberation about this concept. The topic of partnerships was not focused upon to any large degree by presenters, yet it is a concept which many feel has most promise for universities (Sirotnik & Goodlad, 1988; Gross, 1988). In Richard Clark's recent review of collaboration, *School-University relationships: Partnerships and networks,* he deals with the question of whether the actions represented by the terms alliance, coalition, and the like are simply the same operations with different names. His conclusion is that they are not the same. They describe activities varying from arrangements on paper to relationships based upon patronage and grants, to ones which involve an equality of action and benefits. While networking may involve information sharing with each taking and giving what they desire, partnerships imply more equal sharing and more equal benefits and advantage to the "partners."

For collaboration between universities and schools, it is the latter arrangement which has most promise, according to Sirotnik and Goodlad. They are quick to acknowledge, however, that while partnerships abound, the somewhat ideal paradigm they suggest for partnerships, a "mutually collaborative arrangement between equal partners working together to meet self-interests while solving common problems," has rarely (if ever) occurred in practice (Sirotnik, 1988). They suggest more research, experimentation, and more documentation of working models focused, again, on the relationships between universities and schools.

Theodore Gross' book, *Partners in Education*, argues as well for the Sirotnik/Goodlad paradigm, but directs the case more strongly at universities. In his book, he quotes Ernest Boyer to set the problem:

> Today, with all the talk about educational excellence, schools and colleges still live in two separate worlds. Presidents and deans rarely talk to principals and district superintendents. College faculty do not meet with their counterparts in public schools, and curriculum reforms at every level are planned in isolation. It's such a simple point--the need for close collaboration--and yet is it a priority that has been consistently

> ignored. Universities pretend they can have quality without working with the schools, which are, in fact, the foundation of everything universities do. (Boyer, 1985, p. 11)

Gross states:

> Whatever the motivation and however difficult collaboration may be, there is a recognized need for sharing concerns--for partnerships. These must include corporations, all levels of government, and communities. And though the relationship may be tenuous at first, they are essential. A college or university is the ideal constituent to create academic relationships with secondary schools, to sort out educational priorities with corporate classrooms, and to engage citizens in partnership projects that affect their communities. Colleges must now view the development and administration of educational partnerships as a central aspect of their mission, as an obligation to the society they serve, and as an opportunity to establish an agenda for action that no school system, corporation, community agency or government can realize alone. (Gross, 1988, p. xiii)

While Sirotnik and Goodlad structure their work around the identification of concepts, cases, and concerns with partnerships, Gross presents a more focused rationale for partnerships enacted by universities, and in his book offers more or less a blueprint for action. Each work has a common message. After one studies the nature of collaboration and sees its many forms and when one looks at these within a contemporary context of need, the paradigm of partnerships characterized by an implied equality of giving and taking--of sharing and of benefitting--appears to have most promise.

In the summaries below, the major speakers and presenters have a variety of stories to tell, and what can be gleaned and implied from their remarks and study depends in part on what questions we ask of their work. It is suggested that from a broad perspective, we should ask if what is presented and what is being studied will fulfill the promise of building common educational agendas. If yes, then it is full steam ahead with more and better of the same. If the commonality we seek seems illusive, this may call for greater focus and coordination of our future efforts. More specifically, the works below can be assessed from the viewpoint that the nature of collaboration as a complex and varied phenomenon and that certain kinds of collaboration may better satisfy our common contemporary needs as generally accepted by the educational community. What manner of collaboration holds most promise? Are partnerships of the kind suggested by Sirotnik, Goodlad, and Gross, for example, deserving of greater focus and effort? The reader is invited to make these judgments.

References

Clark, R. W. (1986). *School-University relationships: Partnerships and networks.* (Occasional Paper No. 2). Washington, Seattle: University of Washington, Center for Educational Renewal.

Gross, T. L. (1988). *Partners in education.* Chicago: Jossey-Bass.

Sirotnik, K.S., & Goodlad, J.I. (1988). *School-University partnerships in action.* New York: Teachers College Press.

Remarks of the Major Speaker

Terrel H. Bell drove right to the heart of a national problem that must be solved if we are to compete as a nation in the world economy. His remarks are most fitting for there is no one answer, no one person or group to blame, no one group of persons who can solve this problem alone. It will take the awareness and knowledge of the problem by those most invested in its solution(s). This will require an attack from many fronts, not simply one, and the attack will need to be a concerted effort, one involving many groups in massive collaboration. Our youth will not alone prevent themselves from dropping out, nor will our teachers be able to lift themselves up by their own bootstraps under a cloud of disrespect and criticism. The public must come to value the education of youth and to respect those persons charged most directly with providing that education, our teachers. How can this be accomplished? Former Secretary Bell's remarks are an eloquent call to action.

School Quitters and Teacher Turnovers
An Albatross on the Back of Our Economy

Terrel H. Bell

As virtually everyone in this audience can attest, we are still living through an era of apprehension about the ability of our country to compete effectively in the international marketplace. As we were reminded in the now famous report, *A Nation at Risk*, we live in a global village of international commerce and trade. Future wars will be trade wars and future conflicts will be economic in nature. The world has changed so rapidly and radically over the past ten years that we in the USA are finding it difficult to export as much as we import despite the fact that our standard of living will rise or fall dramatically on the outcome.

Out of the nationwide concern about our future, the school reform movement was born back in 1983. We have discovered, at long last, that we cannot be economically competitive if we fail to adequately educate our people. The level of education required to have a world class economy is much higher than it was back in the 1960s or even the 1970s. That is why our new president has said that he wants to be known as the education president, and that is why some of our leading governors keep coming back to education as the key to attracting new industry to their states.

The Carnegie Commission in its report, *A Nation Prepared: Teachers for the 21st Century*, states that:

> America's ability to compete in world markets is eroding. The productivity growth of our competitors outdistances our own. The capacity of our economy to provide a high standard of living for all our people is increasingly in doubt. As jobs requiring little skill are automated or go

offshore, and demand increases for the highly skilled, the pool of educated and skilled people grows smaller and the backwater of the unemployable rises. Large numbers of American children are in limbo--ignorant of the past and unprepared for the future. Many are dropping out--not just out of school, but out of productive society.

If our standard of living is to be maintained, if the growth of a permanent underclass is to be averted, if democracy is to function effectively into the next century, our schools must graduate the vast majority of their students with achievement levels long thought possible for only the privileged few. The American mass education system designed in the early part of the century for a mass production economy will not succeed unless it not only raises but redefines the essential standards of excellence and strives to make quality and equality of opportunity compatible with each other.

Compared to education in the past, we are doing quite well in educating the American people. But compared to today's needs and those of tomorrow, we are dreadfully deficient. Too many students quit school without the academic skills and related capacity to learn and attain a level of skilled intelligence commensurate with today's job requirements.

Three out of ten high school freshmen quit school and never graduate! That number reaches up to 50% and 60% in our great cities, and 40% of the nation's Black and Hispanic teenagers are not even in school. We know that among these vast numbers are hundreds of thousands of academically able persons whose full potential will be lost to the nation and to themselves. We simply cannot tolerate, nor endure for long as the leader of the free world if this dropout plague continues to strike at the heart and soul of American society. The puzzling thing, to me, is the lack of a nationwide effort to keep our youth in school and fully motivated to bring their talents to full fruition. But there are a few encouraging signs.

In Washington State, more than 11,000 students dropped out of regular high schools in the 1986-87 school year--a dropout rate of 19%. But there were:

- 65 schools with rates greater than 25%
- 43 schools with rates greater than 30%
- 16 schools with rates greater than 40%
- 5 schools with rates greater than 50%

One of the most crucial aspects of the dropout issue is the perception that somehow these people are society's rejects, that no one really cares. Students who drop out of high school usually feel neither at ease with the system nor self-fulfilled. This nation stands for equality and opportunity. Yet the present failure rate represented by the dropout statistics renders these values farcical, a social travesty for far too many of America's and Washington's children. (Governor's Task Force Report, p. 7)

> Too many students now complain that their school and their teachers don't care, that the curriculum and the school organization and structure are uninteresting and boring, and that the school is not challenging nor an enjoyable place to be. They want to get out. Too many do. (Governor's Task Force Report, p. 11)

A *Newsweek* article stated:

> All 50 states have adopted some form of reforms, some starting before 1983. More than a dozen have completely overhauled their school systems. Roughly 40 states have raised high-school graduation requirements; in 19, students must pass a test to receive diplomas. Forty-six have mandated competency tests for new teachers; 23 have created alternative routes to certification. Teacher salaries have increased, on average, more than twice the rate of inflation, to $28,031 this year. Six states are now legally empowered to "take-over" educationally deficient schools... Nationwide, average combined SAT scores have recovered 16 points since 1980, reversing a 90 point decline from 1963.

We cannot place all the responsibility for education's shortcomings at the doorstep of the schools. Our teachers have a right to expect that students they are asked to teach will enter their classrooms with healthy, teachable attitudes and with respect for the significance of education in their lives. Instead, they meet many students who are emotionally disturbed and possessors of low self-esteem. They come from vastly different homes than those of the past, from a society in which only one out of five live in a traditional family structure where one spouse is at home during the day. Indeed, fully 80% of the students in our public schools live in homes where neither parent is at home during the day, and 40% of our students live in homes with a single parent.

Many schools are being flooded with children of immigrants--both legal and illegal--with limited English proficiency. Also, vast numbers of today's students come home to an empty house because school hours do not coincide with parents' working hours. Day care and child rearing conditions in America are chaotic. Is it any wonder that our schools are struggling with a horrendous burden of poorly motivated students? The foundations of our schools rest on the family and the structure of home life, and these have been crumbling over the past two decades.

So, there is a great plague upon our country with over 1,000,000 out of a grade level cohort of 3,500,000 failing to graduate with their classmates. These are tomorrow's welfare recipients, prison inmates, and recipients of unemployment compensation. The dropout plague is the biggest problem facing our nation today, but you would never know it if you watched the news media. If some debilitating disease was so rampant in the land that it was striking down three out of ten of the rising generation, there would be cries of outrage followed by demands for action.

How do we rally the American people and make education as a top priority nationwide? Education is economic development. Education is the prime ingredient for success because without skilled intelligence and a high level of literacy and overall capacity for learning, we will never be an efficient and competitive people. Not including Alaska with its vastly higher cost of living, one state spends over $6,000 per student on public school education while another spends only $2,390. One state spends 37.1% of its per capita income on education while another pays out only 21.8% of its income per capita on its schools. One state has a pupil-teacher ratio of 13.7 :: 1, while teachers in another state carry a 42% higher load. We need to redress these inequities so a child is not hurt because he or she happens to have been born in a state where commitment is deficient.

We are becoming a nation of educated and undereducated and illiterate people because educational accomplishment differs so greatly across the land. In the latest US Department of Education ranking of the states, one state had a high school graduation rate of 56.6% while another one graduated 91.4% of their entering high school class. Not only do we have their great disparity in education accomplishment among the states, we have similar inequities among the races and ethnic groups that populate our country!

The problem of school quitters is not limited to students, we have teacher dropouts as well. This audience is well aware of the constant flow of very able people who were attracted to teaching because of their love of learning but left because of the futility found in trying to pay their bills and support their families. We need corps of teachers to serve our youth today. We are losing far too many of our very best teachers. The drain is relentless, and it keeps our schools preoccupied with orientation and transition of faculty when we need stability and leadership from the bright, perceptive, and personable people who leave us by the thousands every year. It must be disheartening to you to work so hard to prepare teachers only to lose so many after one to three years of service. In purely economic terms, the teacher talent drain adds to the weight of the albatross and the burden on our economy that is already there because of the one million plus school quitters that dropout annually.

Given all that I have discussed concerning the significance of education to our nation's well-being and given the great inequities and deficiencies in education, it may not be difficult to persuade you to agree with the following six statements about American higher education.

1. In contrast to our troubled public schools, the USA is being served today by the most diverse, and the best, system of colleges and universities in the world.
2. No nation has the great, powerful research universities to even begin to compare with our big public and private institutions.

3. No nation has a system of state colleges and universities--some 400 strong, easy access degree-granting institutions that are the people's colleges.
4. In no country will you find liberal arts colleges of the number, quality, and diversity as those that serve the people of the USA.
5. The community colleges--remarkably flexible two-year institutions offering lower division undergraduate studies, vocational/technical coursework, evening and weekend courses, and a second chance to late bloomers who need to gain some academic repentance for a misspent youth--are uniquely American schools, and will be great assets in the trade and commerce world of the future.
6. But, despite the excellence of higher education, schools are not being served as well as the time demands. Of all the many roles and responsibilities of American higher education, nothing is more crucial than that of recruiting and educating tomorrow's teachers, which has been neglected by some universities and given a low priority on others. Teacher education has not been a high priority with respect to budget, scholarships, physical facilities, and provisions for distinguished professorships and endowed chairs. In no way does the education of teachers enjoy the campus-wide acclaim of many other disciplines and professions.

Conclusion

America must reorder its priorities. The care, nurture, and education of our youth must move to the top of national, state, and local agendas. Our human resources are being wasted; the price we are paying is expressed in illiteracy, dropout rates, and trade deficits, strangling our capacity to provide the standard of living and the fruits of the American dream to fully one-third of the nation.

To all of you whose labors are tied to the education of America's teachers, I plead for more activism on your campuses and less complacency. The necessary revolution in American education to save and renew our schools must begin with our great college and university system. The recruitment and education of a new generation of dynamically gifted teachers will not happen with the low priority that scholarships, fellowships, and distinguished professorships are allocated among the department and professional schools in our colleges and universities.

Elementary and secondary education can't win with business and in the political arena if it keeps losing its appeals to higher education. We can convince very few of the key decision makers outside of education to rally around our schools until the education of tomorrow's teachers occupies a special and privileged place on the campuses of all institutions of higher learning. I am not calling on you to be sullen or mutinous but know, as surely as I stand before you, that you must take the lead and be more demanding as you present your case for teacher education to become the number one priority on your campus.

Featured Symposium

One avenue to understanding the nature of collaboration is to examine one of its major facets from different perspectives. In the first major symposium, the topic of cooperative learning was examined from the perspective of kids learning cooperatively with kids, and teachers--both neophyte and experienced--learning cooperatively with teachers. The topic was explored also from both a research and a practical perspective. Robert Slavin, principal researcher at Johns Hopkins Center for Research in Elementary and Middle Schools, presented his views on cooperative learning based upon extensive research in classrooms. James Cooper and Susan Prescott, professors at California State University, Dominguez Hills, presented their ideas on cooperative learning as it applied to postsecondary education, specifically the training of teachers. Remarks of the presenters are summarized below with major points expressed through their own words.

Cooperative Learning: Kids Helping Kids, Teachers Helping Teachers

Robert Slavin

Robert Slavin began with concrete descriptions of exactly what was meant by the term, cooperative learning, as it applied to the typical elementary classroom. "In cooperative learning, one of the things that characterizes cooperative learning methods generally is that you have kids who are assigned to small learning teams or groups of usually four or five members. These teams are heterogeneous. There are high, average, and low achieving kids and boys and girls on each team; there are students of many ethnic groups represented in the class also distributed among the various teams. In our own versions of cooperative learning, these would be called teams. They would have team names and they would stay together for a period of time, usually about six weeks, and then be reformed along similar lines. But the idea is that this is not an ad-hoc grouping. This is a group that is important for the kids, that kids would identify with and feel that the success of that group is important to them as individuals.

The group's responsibility, by and large, is to make sure that everybody in the group has learned that which the teacher has presented. In other words, the responsibility of the group is typically not to work together to complete something, to complete a single project, but rather, to make sure that whatever was taught has been learned by all members of the group. There are many exceptions, but that's the general case of the forms of cooperative learning that I'll be talking about today. So in the simplest forms in elementary and secondary schools, there's a cycle of activities that would characterize the use of a cooperative learning strategy.

While it's not true of all cooperative learning methods, all of the ones that we've developed and researched have the following basic cycle: original teaching, or

input of information in some form, opportunity for teams to work together, and then individual assessment and some kind of team recognition or small reward, based on doing well as a team. This basic cycle that I just described--teacher teaching, kids working in small teams--will work as a basic strategy."

Slavin went on to contrast the cooperative learning classroom with the more traditional classroom, pointing out that the differences are really not that great. "The real modifications are mostly in the use that's made of practice time, teaching the group instead of the individual, and in the use that's made of the final scores, both individual grades and team scores of some kind." But he stressed the importance of the differences and explained why. In everyday classroom life Slavin feels that we set up situations in which kids are rooting for one another to fail. "The kids who think they know the answer want other kids to fail because then they'll get a chance to show how smart they are. The kids who don't know the answer, however, are kind of hoping other kids will fail because then they won't look so bad themselves. They say, 'I am glad somebody else didn't understand that.'" In a competitive reward structure, a situation is also established which invites a negative kind of peer pressure. "Quite often kids who are very able will not show that, they will not put out the effort because it gets them in trouble with the peer group...The way the group enforces mediocrity is to insult those, and to exclude those who look like they're working too hard. One of the most important things that cooperative learning is doing is turning that situation around 180-to one in which the peer group is actively supporting academic excellence, in which the group is happy when you know the answer." Slavin then pointed out other benefits of cooperative learning, both motivational and cognitive.

> The motivational impact of cooperative learning is extremely important, particularly as kids move into early adolescence, the upper elementary grades, and then into adolescence itself. I think anyone who has taught in a secondary school, or the upper elementary grades, knows how you get into a struggle with kids. The teacher says learn, the peer group says that's for sissies, and you're in a constant struggle with kids for the soul of each learner. Trying to get the kids supporting academic achievement, then, is extremely important.
>
> In addition, there are several cognitive impacts that are also quite important in cooperative learning. Everybody knows that you learn a great deal by teaching, by explaining something. You also learn by discussing with someone else that which you have just learned. Again this is very clear in our own experience. This is not just learning by teaching, this is learning by discussing, by exposing your current level of understanding and interaction with somebody else.

Slavin stressed the power of explaining and discussing among students in terms of the mental processes this requires. In order to explain and discuss, they must

reorganize the information so that they can articulate it not only for themselves, but for the persons with whom they will be discussing. He went on to discuss briefly some other advantages.

> Another thing that happens within cooperative groups is that students have the opportunity to translate teacher language into kid language. Or to put it more formally, to translate the language of somebody who's long ago learned to master something into the language of somebody who's just getting hold of it. Oftentimes kids or learners can still have their learning processes available to them. They can make them overt, where the teacher has long since forgotten how he or she learned that material and therefore teaches at too high a level of abstraction. (The teacher) says, 'Why can't they understand this? It's so easy.' But somebody who's just grappling with a difficult idea can often be the person to say, 'Oh, let me explain how I got it, I went this way, this way, this way.' And another kid who's also at that cutting edge point can then begin to understand it. This is a principle that was not exactly new.
>
> Another thing that cooperative learning can do just on a routine basis is to provide students with a very safe and regular opportunity to expose their ignorance. Quite often when you teach a lesson you've got some kids who are sitting in the back and they are not getting it. They are not going to raise their hands and ask a question because they're afraid that people will laugh at them. But what they do is kind of hunker down, look small, and hope that nobody calls on them. Or that somehow lightening will strike and they'll get it. And they may believe that everybody else is getting it and they're the only one that's not. This may or may not be true. Building into the routine of the cycle of lessons an opportunity for kids to talk with each other can be an excellent means of overcoming that problem.
>
> Finally, for certain kinds of objectives, cooperative learning is just an extraordinarily useful way to practice. There's no more effective way of mastering something than working in a pair with somebody else, going back and forth and just practicing until you get it. Effective learners have always known this.

While praising the virtues of cooperative learning, Slavin was careful to point out some pitfalls and contingencies for success. Considerable research at the Hopkins Center had focused upon those factors leading to the success of cooperative learning. "It is essential that there be some kind of group goal or reward, something that the group is trying to achieve as a total group...Kids will not do the really demanding work that's necessary to explain to one another, to assess one another, to really take one another's achievements seriously, unless there's something that they're trying to achieve as a total group....The success of the group must be dependent upon the individual learning of all members of the group. The bad kind of cooperative learning. . .is of a kind that ignores this principle."

Slavin went on to say that it is possible to have cooperative groups that do not have individual accountability, but that this will be counterproductive. The slower, less informed, or simply less aggressive youngster may be shut out early on from being involved in achieving the group goal, and it may be perceived by other group members that to take the time to explain may hinder progress of the group. This is an example of a case in which solving the problem is a more important goal than explaining, teaching, or discussing it among group members. In Slavin's words, "The purpose of the group cannot be to do something, it's got to be to learn something, or to make sure that all members of the group have learned something. That is absolutely critical for the achievement success of cooperative learning. Approximately 40 studies of cooperative learning were conducted of which 35 found significantly greater achievement in the cooperative groups than in control groups. The others found no differences. The effects are essentially equivalent for high achievers and middle achievers."

Slavin covered very briefly some other benefits of cooperative learning which have shown up in the research he has conducted. Cooperative learning has been found to be very effective for improving intergroup relations and race relations. It can improve the mainstreaming of academically handicapped children. Kids generally feel better about themselves, like the class, like the subject more than kids in regular classes. And as one would expect, the human interaction skills, the ability to work cooperatively, the notion of solving problems jointly are highly valuable outcomes of cooperative learning. Areas being studied now are applications of cooperative learning strategies to topics such as peer coaching among teachers, heterogeneous ability grouping including mainstreaming, teacher involvement in decision making within the school, and parent and community participation in the welfare of school aged children.

Robert Slavin concluded his remarks by introducing his colleagues, James Cooper and Susan Prescott, and the topics they would address. James Cooper began by stating the purpose of his and Susan Prescott's presentation. "We will talk about some problems in contemporary collegiate teaching and learning (and) deal with at least one solution to those problems, an active learning strategy called cooperative learning. We will deal with some problems and some promises in terms of that solution and problems with cooperative learning research at the college level and some promising alternatives to traditional forms of instruction at the college level. Finally, we'd like to talk a little bit about our survey of over 1000 students who've been exposed to cooperative learning at California State University, Dominguez Hills, in about 12 different classes across the curriculum."

Cooper cited much of the recent and past criticism of undergraduate teaching and learning, emphasizing some of the findings of the recent Carnegie Foundation

on classroom practices. Classrooms are largely situations where students are passive, where they are lectured to, and where relatively little time is taken up with active learning strategies--things like small group instruction or situations where students were interacting with other students or the professor around academic topics. Much of the research on student retention centers on students feeling uninvolved, not feeling a sense of belonging to either courses or college, and boredom.

Cooper pointed out also that college populations are changing to include greater diversity in age and background, ethnicity, and ability to attend full time. Greater percentages are also lacking in the basic skills needed to succeed in college. Cooper feels that more active learning styles of teaching are required to meet these new demands, and that students themselves must become more responsible and more actively involved in their own educational process. "So that's what we are talking about, getting students more actively involved in their own learning; requiring that students take more responsibility for their own learning, for at least a portion of the class...I think we can't treat students totally as empty vessels to be filled; we've got to engage them with one another and with ourselves and with ideas in a more active sense."

Cooper went on to recommend a more active learning strategy, cooperative learning, that will increase student involvement and mastery, improve student satisfaction with course content and college in general, and will increase students' persistence to graduation and lifelong learning. He went on to state that little research of a comprehensive or rigorous nature has to be reported on the use of cooperative learning strategies at the college level. Studies at the elementary and secondary levels show overwhelmingly positive effects relative to control conditions. Of the studies conducted at the college level, however, a number of problems persist in comparing their findings. First, there have been few studies conducted. Second, there is not a consistent operational definition of cooperative learning used in these studies, and thus, data which would compare results of replicated studies simply do not exist at present. Few strong designs exist also, ones for example that used control and experimental groups as was done in the elementary and secondary levels. Taking into account these flaws, the data from these studies suggest positive effects from the use of cooperative learning.

At Dominguez Hills, they have looked at student outcomes and obtained feedback in the form of a survey from approximately 1,000 students finishing the program in cooperative learning. Cooper felt confident in reporting that students were very praising of the cooperative learning approach, regardless of curriculum area. Aspects such as amount of student interaction, frequency, and quality of student interaction were quite high among the students engaged in cooperative

learning. This seems to have implications for student retention across departments and disciplines, and, with more careful outcome measurement, there may be implications for the infusing of cooperative learning approaches in a broader segment of the curriculum.

James Cooper then turned over the podium to Susan Prescott who would talk more particularly about the reactions of the 1,000 students to the cooperative learning strategies, referring to the written comments that students provided. Comments were content analyzed and clustered by similarity. The positive reactions revolved around the general themes of belong and enjoyment of the learning process. They felt actively involved, more so than in other university course work, and praised the high quality of the experience. They saw genuine application of these techniques to the teaching in which they would soon be involved, and liked the opportunity to evaluate and to have evaluated the experiences they were having. In all, students' comments were highly positive.

Prescott then shared the interesting history of infusing the principles of cooperative learning at Dominguez Hills. The activity started with the attempt to create a model for cooperative learning for student teachers and interns to use in their own classrooms. What started with a nine-contact-hour module in a methods class, some trial and error, and refinement based upon those early experiences, blossomed into university faculty staff development seminars in cooperative learning and a cross-departmental acceptance and embracement of the cooperative learning principles for the university student community. Recently established is a university-wide users group entitled CLUG (Cooperative Learning Users Group) which includes faculty from science, health, foreign language, and others. The most recent project, funded by the Chancellor's Office, is the development of a faculty handbook for use by other university faculty.

A number of interesting questions were asked in the question and answer session following the presentations. For one: How have students been grouped and what sort of reward system was used? Grouping was done in a variety of ways, but was always heterogeneous. With the hands-on activities, little overt reinforcement and reward was required. Another asked if students within groups competed with each other, and was there group competitiveness? Early on in the research, group competitions were tried on the basis that this would encourage within-team cooperation. This was found to work except that it created conceptual dissidence, i.e., valuing cooperation and competition at the same time. It was found that it was not necessary, and in fact some rewards were given for a standard level of achievement gained by all groups.

Another question was: How does one actually carry out the individual assessment? It was done in a variety of ways through tests, essays, and other rather

traditional means. If there was a joint report due, each could take authorship for a certain portion. It was emphasized again that individual accountability means that the individual learning of every member of the group is going to be assessed and the results are going to be the basis for team recognition or reward.

Also, how does one accommodate cooperative learning without sacrificing coverage? It is estimated that there is about a 15% drop in content coverage, but this is countered by a 40% increase in mastery of that which is covered. There is a trade-off. More work outside of class is the typical way in which this is made up. Another question was posed concerning parental concerns about group grades. It was reemphasized that ethically, group grades are indefensible. Certificates, recognition, group pictures all can be used, but grades must be individual grades. A portion of the grade can be related to team performance, but it should be kept to a minimum. Parents should be told just how the grades are assigned.

Another person asked about dealing with difficult groups. One can count on having at least one dysfunctional group. Laying out the expectations very clearly at the front end can help to alleviate the problems caused by such a group--no put downs, do not interrupt, do active listening, etc. It is recommended that groups not be broken up except in the most difficult of circumstances. Dysfunctional teams are often brought together, because as time passes, they understand that there will be no changes.

Often times kids will conclude that it is more trouble to hassle each other than to get the job accomplished. But there is no magic. It will take the skills and abilities of a teacher to make this work just as with other kinds of approaches. The first two weeks will be difficult most likely, and problems will occur that are unavoidable. After two weeks, however, things begin to settle in. Setting aside some processing time at the end of the day to let kids discuss how the teams have been working out has helped this happen.

The audience's reaction was very positive to this presentation, and this topic seemed to have struck a responsive chord with many who wished to discuss and question the presenters following the session. The presentation was unusual in bringing research findings to support recommendations for very concrete practice, and persons who wanted to take from this session techniques and ideas they could actually try at home were not disappointed. In essence, these presenters were relating their successful attempts to engage children and adult students in a more fruitful and more satisfying learning experience, and they accomplished this by establishing environments in which students must cooperate with each other to achieve. These vignettes of teaching and learning serve to illuminate the nature of collaboration shedding light on some tangible strengths of group process.

Selected Papers

Within the category of the Nature of Collaboration, a relatively small number of presentations were made, and they covered a variety of important issues. While these presentations share the common theme, the Nature of Collaboration, they constitute an important informational resource as well. Rather than focusing upon one or two specific papers, a number of different presentations are summarized below both for what they say about collaboration and for what they can offer in a practical sense to those educators also engaged in collaborative pursuits. There is one dealing with theory, two with research, and four with practice. The final paper gives a more personalized overview gained from the author's lengthy experience in collaborative efforts. As stated earlier, as a collective the presentations deal with case studies, theoretical variables, the meaning of collaboration, and the assessment of collaboration, though not necessarily in that order.

Teacher Empowerment and Collaborative Mentoring Partnerships: An Empirical Assessment

E. Dean Butler
Memphis State University

The presentation 1) summarized collaborative partnership designs created to assist novice teachers undergoing transition into teaching, 2) reviewed the conceptual and research bases of the present study, and 3) reported findings of a study which investigated factors influencing professional growth and status of classroom teachers performing mentor roles.

The concept of teacher empowerment (Maeroff, 1988) may be viewed as somewhat "synonymous with professionalization" and specifically associated with enhanced status, becoming more knowledgeable, and attaining power and perspectives not typically associated with teaching. Previous research of the Center of Excellence in Teacher Education (Etheridge & Butler, 1987; James & Associates, 1987) revealed that the personal and professional benefits reported by teacher mentors could be linked to the theoretical scheme undergirding the idea of empowerment. Likewise, center-sponsored research has indicated that a collaborative partnership between university faculty and classroom teachers can facilitate a smoother and more complete transition of students into teaching. However, a key to the collaborative partnership is the successful empowerment of classroom teachers as mentors. Thus, a study was designed to identify specific teacher empowerment dimensions associated with performances of mentor and cooperating teacher roles and determine programmatic and personal factors involved.

Subjects of the study were classroom teachers serving as teacher mentors for fifth-year interns and cooperating teachers supervising undergraduate secondary student teachers across three enrollment periods. Empowerment outcomes were obtained through use of the *Mentoring Empowerment Profile* (MEP) (Butler, 1988), an inventory of six scales of items reflecting the constructs of self-awareness (7 items), understanding teaching (6 items), teacher cooperation (5 items), professionalism (11 items), growth as a teacher educator (7 items), and teacher status (3 items). Group responses to the individual items of the inventory and subscale scores were analyzed as dependent variables. The independent variables of collaborative design, level of involvement in mentor role, mentor success, status on the Tennessee Career Ladder, previous experience in mentoring and supervising student teachers, and selected personal characteristics were found to significantly relate to the six constructs of empowerment.

The importance of the study is that it empirically assesses specifics of teacher empowerment functionally related to the roles of mentors and cooperating teachers. Furthermore, as a study of factors influencing the perceptions and behavioral outcomes of participants responsible for supporting beginners undergoing the transition into teaching, support is provided for creating collaborative partnership designs for inducting new teachers into the profession and for further empowering experienced classroom teachers as teacher educator partners.

The Meaning of Collaboration Implementation

George E. Burns
The Ontario Institute for Studies in Education

Aubrey Smith
The Ontario Ministry of Education

A major focus for legislators, researchers, and practitioners alike in the past several years has been concern about providing more and better education programs and services to children and youth with exceptionalities. State legislators, interest groups, writers in the popular press, professional educators, and researchers have increasingly turned attention toward this end. There is already a growing literature describing both the nature and scope of program needs and the characteristics of effective programs, services (Carlberg & Kavale, 1980; Howart, 1983; Sarason & Doris, 1979; Steinback & Steinback, 1985; Ysseldyke and Algozzine, 1982; Silverman, Wilson, & Seller, 1987), and indeed, schools (Bickel & Bickel, 1986; Crandall, Eiseman, & Lewis, 1986; Fullan, 1985; Rosenholtz, 1985). While there appears to be some agreement about the nature and scope of needs of exceptional children and youth as well as the characteristics of effective programs, services, and schools, there is less information about effective collaboration (Bar & Deflava, 1980; Cranley, 1981; Hagebak, 1982; Roberts, 1980, 1981; Smith, 1986) as a means for achieving such ends.

In contrast to prior work in the field of collaboration, which has tended to view collaboration implementation as a set of policies and appropriate procedures, this paper focuses on implementation as a multi-dimensional phenomenon worthy of study in its own right (Burns, 1986; Fullan, 1982, 1984; Miles, 1986; Sarason, 1982). It provides perspective to collaboration implementation and describes systematically the main issues involved in achieving interagency collaboration in education. The critical questions are: "How to conceptualize interagency collaboration? How to conceptualize the implementation of interagency collaboration? How can a conceptualization of collaboration implementation be incorporated into a planned approach to organizing and coordinating collaboration for the purpose of achieving agreed upon sets of education goals?"

We draw on two main sources of information in preparing the paper: research literature on collaboration and implementation in education, and an examination of an interministerial collaboration project involving three different ministries in the province of Ontario (the Ministry of Education, the Ministry of Community and Social Services, and the Ministry of Health) and their respective service stream

agencies. Because of this project, "A Collaborative Approach to the Co-ordination of Assessment Services for Exceptional Children and Youth in Select Regions in the Province of Ontario," several new initiatives have been funded. The provincial government earmarked approximately six million dollars toward new initiatives during the first phase (1987-88) of a three phase implementation cycle and approximately four million dollars during each of the next three years.

The project has been designed to foster both interagency and intra-agency collaboration. In this approach, the mandates and the roles and responsibilities of the different Ministries and their respective service-stream agencies, as they relate to the assessment needs of children and youth, have been clearly defined. This approach to service delivery among the Ministries relies heavily upon coordination, cooperation, and collaboration over all of the agreed upon areas of shared responsibility in the assessment field.

The presentation was divided into four sections. The first section elaborated on the background to the project including a needs assessment, rationale for the collaboration project, and characteristics of the collaborative model in use. Section two described the scope of the project, its various phases, including the results of piloting, and implementing the model across agencies. Section three defined and explained what inter/intra-agency collaboration is and described the main factors which appear to be affecting (in)effective implementation. In this section emphasis was placed on: a) the logic of collaboration implementation; b) implementation as a process potentially involving the altering of distinct sets of practices; c) the conceptual distinction between adoption, implementation, implementation process, institutionalization and outcome (in the context of collaboration as an innovation); and d) the relationship between adoption, implementation, implementation process, institutionalization, and outcome (in the context of implementation as an innovation). The final section discussed what we have learned about the nature of collaboration and implementation based on the data that we have collected throughout the project as researchers. The paper concluded by presenting a conceptual design for understanding collaboration implementation and suggested ways in which the implementation of collaboration can be improved.

Bringing Teacher Education to Remote Northern Canadian Centres: The AHCOTE Story

A.J. Dawson
Simon Fraser University

Finola Finlay
Northern Lights College

The 1983 report, *A Nation at Risk*, prepared by the National Commission for Excellence in Education, spawned a number of reports aimed at identifying the factors which have contributed to the current state of education in general, and to the performance of teachers in particular; and proposed changes in both the way teaching is conceptualized and teachers are trained. The major problem in teaching has been identified by many of these reports as the deprofessionalized nature of current teaching practices. As teacher educators, the challenge is to produce autonomous professionals who are knowledgeable and skillful.

The task is no small one. Most significant is the enormous weight of the status quo. The classrooms in which students complete their practica and the system into which the newly qualified teachers are inducted often simply do not, or cannot, provide opportunities for any significant changes in either the way the teacher's role is conceptualized, or the ways in which the professional teacher functions. Teacher education programs do have the opportunity to subtly influence current practice of the teachers in whose classrooms the students are placed and thus extend the influence of the university into the field.

The Professional Development Program (PDP) at Simon Fraser University provides an avenue for parallel developments in both the teacher education program, and in the system in which the student teachers complete the practical component of their teacher education and which they will subsequently enter as novice teachers. At the time of its inception, the PDP was an innovative departure from the teacher education programs of the day using a differentiated staffing model in which professors and master teachers (called *faculty associates)* worked side-by-side in the delivery of the PDP. Additionally, the practica were a full six months of the twelve month program, foreshadowing by some 20 years the current movement to longer practica and internships for student teachers. These innovative features served the PDP very well, and allowed for new issues and problems to be addressed efficaciously as they arose. The issue addressed in the study was the following: How to deliver teacher education programs to remote northern Canadian settings which met the needs of the northern clientele.

Presentation

School districts and students in northern British Columbia are faced with many problems caused by geography. Distance from the three provincial universities makes it difficult for northern people to train as teachers. Those who leave to do so often do not return to the north to teach. They are, moreover, trained in the southern regions of the province close to the United States border, far from the cultural and environmental conditions of the north. The perceived inhospitality of the northern climate and the geographical isolation, to which many northern teachers must adapt, makes it difficult for northern districts to attract and keep teachers in their schools. The Faculty of Education of Simon Fraser University has, for some years, offered the PDP in northern sites. It was a one-year program which served many but not all of the needs of a northern clientele. The scope of that program needed to be broadened.

As a result, three northern British Columbia school districts, the locally based Northern Lights Community College, and the University formed a unique and imaginative partnership to create a program called the Alaska Highway Consortium on Teacher Education (AHCOTE). AHCOTE is a three-year teacher education program which is based in Ft. St. John, Dawson Creek, and Ft. Nelson, northern communities which are 600 air miles north of Vancouver, Canada. The AHCOTE program trains northern residents, who are more likely to stay in the north, in a situation which will reflect northern conditions.

The AHCOTE program has a unique governance plan. Representatives from each of the three participating school districts, the community college which serves all three centres, and the university formed a policy committee which operates on a consensus model and makes all policy decisions regarding the program. It was this committee which established the philosophy, scope, and sequence of the program. Because of the remoteness of the program from the main university and lack of direct access to the professorial faculty of the faculty, the policy committee felt that steps to maintain the academic integrity of the program had to be taken. Moreover, the steps taken had to be visible to not just the local communities, but to the province at large, because of a very strong desire by all concerned parties that the AHCOTE graduates not be viewed as having received inferior training. This was the first time in the history of the province that locally based community colleges were to be given a role in teacher education. Additionally, local teachers were hired as faculty associates, and one of them was designated as the coordinator of the entire program. Consequently, the AHCOTE program was truly a joint venture of the university, the teaching profession, local school districts, and the local community college.

Professional Development Schools--A Collaborative Effort

James McLoughlin
University of Louisville

Professional development schools (PDS) are the major instrument for needed changes in the schools and in university teacher preparation programs. The Jefferson County Public Schools (JCPS) have implemented a major restructuring effort through the creation of Professional Development Schools. University of Louisville's School of Education and its Center for the Collaborative Advancement of the Teaching Profession focuses faculty efforts and the field component of its teacher education programs in these schools to promote the school's agenda for change and development of innovative teacher preparation strategies.

The school district intends that the PDS schools will serve as exemplars of practice and as centers for the induction of new teachers and administrators. As exemplars of practice, these schools are to serve as models of what is expected in all schools in the system. As centers for induction, these schools will serve as places where persons new to Jefferson County will be provided with opportunity to develop or affirm the beliefs, attitudes, skills, and knowledge needed to uphold the standards of exemplary practice.

During the 1986-87 school year, faculty from 24 Jefferson County Schools, union leaders, principals, university faculty, and central office staff worked together to develop a set of beliefs and standards that would guide the continuing evolution of PDS.

An induction system will be designed to support these beliefs and standards. In addition, selected schools have begun implementing improvement plans aimed at increasing the capacity of schools to meet these standards.

Also, during the 1987-88 school year a system for assessing the status of schools in comparison to the proposed exemplary standards will be developed and tested. Finally training/development programs will be designed that will provide support to local schools in developing those skills, styles, staffing patterns, structures, strategies, and systems needed to pursue the beliefs and standards that have been developed.

The Jefferson County Public Schools/Gheens Professional Development Academy and the University of Louisville collaborate on a regular basis to ensure that implementation of PDS and the design of an induction system proceed on schedule.

Colleges of teacher education and school systems often work in almost total isolation from each other. With the establishment of the JCPS/Gheens Professional Development Academy and the Center for the Collaborative Advancement of the Teaching Profession, however, cooperation has become the norm. Classroom teachers have been named adjunct professors in order to teach classes and to supervise student teachers for the university. University professors are actively involved in the planning process for the school restructuring initiatives. The school system and the University cooperate on placement of education students for field work, and decisions are made only after consensus has been reached. Responsibility for the training of on-site supervisors for education students has been jointly assumed during the past year. A clinical instructorship program allows a school system person to work full-time, study for a doctorate, and get a regular school salary and tuition remission.

The School of Education has had a strong working relationship with JCPS for years and maintains a significant part of the teacher preparation program in the field. University faculty are assigned to a set of elementary, middle, and secondary schools as part of their instructional, research, and service load. They cooperate with the principal and faculty in attaining their PDS goals and conduct their student training activities there. They stimulate the exemplary practice among the teachers that the teacher trainees can observe and imitate. Student teachers are inducted into the school environment in unique ways. Also, action research projects are conducted with the teachers.

Special study and consideration must be given to the different cultures of the schools and university in deciding staff assignments, rewards, etc. There are also issues such as responsibilities and academic credit which must be addressed.

Among the advantages of this collaborative approach are a franker environment in which to address mutually relevant issues, a more frequent and focused communication network, an increase in collaborative activities, and a direct means to develop sites for teacher preparation in which exemplary practice occurs.

Enhancing Minority Recruitment and Retention: Collaborative Strategies Linking Universities, Public Schools, and Businesses

Barbara Simmons
New Mexico State University

The task of recruiting and retaining talented minority teacher education students and faculty requires the joint efforts of universities, public schools, and businesses. "If present trends continue, the proportion of minority teachers (about 5% in the year 2000) will differ so severely from the proportion of minority pupils (about 40% in the year 2000) that the effectiveness of education will be compromised for all students (Western Interstate Commission on Higher Education, 1988 Report). In the Southwest and in New Mexico in particular, the following statistics further underscore the need:

--In New Mexico, 9.5% of the population is under age five, approximately one-quarter higher than the 7.6% for the nation as a whole. In 1980, the population of New Mexico of all ages was 52.6% Anglo, 36.6% Hispanic, and 8.1% American Indian. In contrast, 40% of the under age five population were Anglo, and 44.6% were Hispanic, and 12.1% were American Indian. Since 1980, these shifts have intensified.

--In New Mexico, only about one-half of American Indian and Hispanic adults have completed four years of high school. In contrast, 75% of Anglo adults completed high school.

--In New Mexico, Hispanics were only 22% to 28% of postsecondary enrollment in 1984. Hispanics receive only 11.6% of the doctoral degrees and 18.5% of the Master's degrees.

Described below, very briefly, are 14 strategies which are in progress and six strategies that have been planned but as yet not implemented.

Strategies in Progress

1. Faculty Mentoring. Each year some 200 entering minority students are identified by the Teacher Education Program director. Each faculty member is assigned five to seven students to mentor.
2. The Hispanic Education Association. The group discusses issues of importance to Hispanic educators, creates a support network, and sponsors projects.
3. The Education Council. This group of outstanding business leaders from many New Mexico sites and El Paso meets quarterly and serves as an advisory council

for the COE. One goal of the committee is to inform citizens of the important role that teacher education plays in the economic development of New Mexico.

4. Quality Education VII. The university annually sponsors a conference for policy makers and educators. Two hundred participants discuss educational issues and make recommendations to the governor, State Department of Education, Commission on Higher Education, and the State Board of Education.

5. Mountain Bell Conference. Because of the strong statewide interest in minority issues and education, $75,000 has been allocated by Mountain Bell for several conferences, the first co-sponsored by the Western Interstate Commission on Higher Education. Five hundred business leaders and educators learned about the rapid increase in the proportion of minorities in New Mexico and discussed the impact of the demographic changes on the educational system. Future conferences will focus on specific strategies for ensuring a well-educated work force.

6. Minority Education Committee. A committee composed of representatives from all the departments in the college and a counselor from a local high school (predominately minority population) is developing strategies to recruit and retain more minority students.

7. Action Research. An action research program permits faculty, minority undergraduates and graduates, public school personnel, and business representatives to solve problems. International projects centered in Central and South America involve minority students in exchanges and international student teaching.

8. Field Experience. Field experience in Native American reservations, urban settings, and Juarez, Mexico, allow minority students to take a leadership role in planning and directing the activities.

9. At Risk Task Force. The superintendents in Southern New Mexico and New Mexico State University will hold a conference this fall to plan strategies for assisting "at risk" students. Because many New Mexico citizens will be first generation college students, one plan is to have all fifth graders visit the campus of an institution of higher education.

10. School Counseling Grant. The College of Education has received a three-year grant to train bilingual school counselors. The grant will provide financial support for 18 students who are pursuing an MA degree.

11. Internship Program. Talented minority graduates are recruited for a first year teacher induction program that results in the a Master's degree.

12. The Cooperative Program in Teacher Education. Minority students can earn a stipend while practicing teaching techniques in area classrooms.

13. Scholarships. Because teacher education is recognized as an "all university" endeavor, scholarship funds for students who will enter teacher education are being sought by the deans of the Colleges of Arts and Sciences, Engineering, etc.

Joint summer programs in which peer counseling techniques will be taught to high school students, classroom teachers, and university students also are being planned and funded by an oil company.

14. Correctional Educators Conference. Minority faculty work with minority and majority corrections teachers to develop teaching strategies to succeed with a high prison inmate population.

Planned Strategies

1. Alternate Routes to Certification. The use of the Weekend College, off-campus courses, and late evening courses to develop a certification program for older minority students will be explored.

2. Cooperative Research Projects with Business and Industry. Dialogue with industrial leaders to identify research problems to fully utilize minorities as human resources will be proposed.

3. Vocational Education Internships with Businesses. Private sector organizations will be encouraged to develop internships which will promote minority student entry into vocational education.

4. Minority Alumni Recruitment Task Force. Minority alumni will form a task force to develop activities which will promote recruitment of minority students into the teaching profession.

5. Provide Support for Students to Move Easily from Two to Four Year Institutions. A joint committee will develop the necessary strategies to ensure necessary support.

6. Improve Entry Assessment and Program Assessment Procedures. Methods to individualize entry level assessment to take into account educational potential will be considered. Program assessment procedures will be used to improve student progress rather than to sort students.

The efforts underscore the theme of the Western Interstate Commission on Higher Education 1988 report, "...many people, groups, and institutions must work together to meet the challenges of minority education"...and to "serve the underlying social objectives of equal opportunity, social justice, and economic prosperity."

Collaboration With Arts and Science: Instructional Enhancement Partnership

Mary Jan Bancroft and Stephen Lafer
University of Nevada-Reno

This presentation described an effort to build a collaborative partnership between the College of Education and the College of Arts and Science at the University of Nevada-Reno for the purpose of improving the quality of teacher preparation programs. In the Holmes Group's *Tomorrow's Teachers*, and other current educational reports, questions are raised concerning the liberal arts portion of teacher education. Critics say that the academic disciplines as they are currently taught suffer from a lack of sound instructional methodology and effective teaching. If future teachers are to be adequately prepared to teach in a technologically sophisticated, information based society, they argue, colleges of education must share their curricular and instructional expertise with liberal arts instructors.

The differing roles of education, arts, and science departments within the university and the difference in orientations affected the liberal arts education of prospective teachers. Two features of the arts and science orientation diminish the effectiveness of liberal arts instruction for teachers. The first is the emphasis in the liberal arts on the training of specialists. Designed primarily for subject area majors, arts and science courses often focus on the transmittal of factual content rather than on the development of conceptual understanding or the foundations of the discipline. Secondly, the emphasis that arts and science has placed on the production of knowledge has resulted in a reward structure that does not encourage or reward effective teaching.

The mission of colleges of education is to inform prospective teachers of effective teaching methodologies and to aid in the development of appropriate teaching behaviors. College of education expertise can and should be used to assist college-level instructors in developing and improving their effectiveness in the classroom. Teacher educators can help liberal arts professors in developing new curricula aimed at promoting critical thinking and conceptual understanding of subject matter. College of education faculty can also help liberal arts instructors develop effective teaching behaviors which will result in more meaningful preprofessional studies for prospective teachers as well as better instruction for all undergraduate students.

The College of Education at the University of Nevada-Reno has begun to collaborate with the College of Arts and Science to develop programs to ensure

that prospective teachers are exposed to meaningful subject-matter curricula and effective teaching. An instructional enhancement project which has been piloted for two years in which department chairs were asked to encourage faculty to participate in the program. Over a period of two years, volunteers from various disciplines were observed in their classrooms by College of Education faculty. Narrative data from these observations were used to develop relevant faculty training workshops. Feedback sessions for individual participants were also provided.

The most promising aspect of this project is the fact that education faculty has been invited into the classrooms of instructors from other colleges and schools and asked to assist in the development of effective teaching strategies. Problems and limiting factors were encountered during the pilot programs and are currently being examined in developing the next stage of this collaborative partnership with arts and science.

What is envisioned for the future is a collaborative effort to create a permanent instructional development center for the university. The center will allow the College of Education to provide instructional expertise to faculty campus-wide. The paper will describe the research, program development, and service functions of the proposed center. While the center will conduct research in instructional methodologies and effective teaching at the college level, its main function will be to provide instructional enhancement services. Consultation will be available to individual faculty members, department chairs, and other university administrators. Programs and seminars will be developed to meet perceived needs of campus instructors. In recognition of a common lack of formal training in pedagogy, the center will provide instructional support services for junior faculty and teaching assistants in arts and science.

Problems anticipated in the establishment of the instructional development center is resistance from certain arts and science faculty members who have low opinions of colleges of education in general and faculty who may exhibit sensitivity to what they perceive to be criticism of their teaching.

The issue of institutional support of instructional enhancement activities was discussed. University of Nevada-Reno administrators have promised $10,000 to support a year-long planning phase for the center. Efforts have been launched to secure permanent funding during the planning phase.

It is hoped that other teacher preparation programs may benefit from the model established at the University of Nevada-Reno.

Reflections of an Experienced Collaborator

Thomas M. McGowan
Arizona State University

Disenchanted with the large-scale, mandated "quick-fix" school reform of the early 1980s, educators increasingly initiate focussed, locally-generated, long-term programs for school renewal. Tight budgets and overextended teachers force school "evolutionaries" to explore alternative processes for these changes. Perhaps the most promising of these approaches is collaboration--long-term partnerships in which members accept responsibility, share authority, and pool resources to achieve a common goal (Hord, 1986).

Many change advocates target a particular type of collaboration, school/university partnerships, as a vehicle for transforming American education. Goodlad (1987) termed "top-down" school reform a faltering movement unable to remove twin impediments to real recovery, school structure, and climate. He championed school/university collaboratives as the means to reduce these barriers to renewal. Wilbur, Lambert, and Young (1988) maintained that school/college partnerships foster the sharing, constructive debate, and problem solving required to meet today's pressing educational challenges.

Unfortunately, collaboration's proponents seem long on conviction, but short on evidence. One observer noted that collaboration lacked even a minimal research base and accused supporters of describing, designing, and dreaming about partnerships without ever analyzing or evaluating the process (Houston, 1979). A second characterized the collaborative relationship as unknown territory and recommended studies that explore its mechanics (Hord, 1986).

This situation alarms "us collaborators"--participants in school/university partnerships convinced of their value. Before collaboration generates substantive and widespread school improvement, educators need literature that does more than sell the process or depict life in a typical partnership. Potential partnerships await studies that define true collaboration, compare types of partnerships, analyze their structures, identify factors in their successful implementation, and document collaboration's effectiveness (Intriligator, 1983; Van de Ven, 1976).

This "how to" article responds to the call for more information about partnerships by offering tips for their successful implementation. More specifically, I state my assumptions about collaboration, identify potential problem areas, and outline strategies for overcoming these pitfalls. This article shares knowledge gained during four years of collaborative work, and, hopefully, provides guidance for educators pursuing school/university relationships.

Life as a Collaborator

Since 1985, I have established, encouraged, and investigated partnerships for instructional improvement. Educational collaboratives consume most of my professional life. My collaborative role began as a member of a task force exploring more effective ways for Indiana State University (ISU) to "reach-out" to public schools. Increasingly, I became convinced that traditional patterns of university service no longer work well. Like any missionary armed with new conviction, I approached the Vigo County (Indiana) School Corporation and established relationships with two elementary schools. Problem-solving teams of teachers, administrators, and professors were formed at both buildings. We targeted a problem of mutual concern, proposed solutions, and implemented these practices. Although I left after two years, the partnership continues without my involvement.

Moving to the Southwest has not diminished my enthusiasm for collaborative problem solving. My research and service center on an "academic alliance" between college and public school faculty. Our purpose is to investigate a perplexing mystery--why elementary science/social studies teaching generates so little learning and so much student negativism. Besides these ventures, I supported other collaborators as coordinator of "Partnerships for Educational Progress" (PEP), Indiana State University's effort to encourage relationships between ISU and Indiana schools.

Assumptions about Partnerships

As participant/observer, midwife, researcher, and advocate, I have gained some understanding of collaboration. Four assumptions now guide my work with schools. First and foremost, I regard the process as a **highly personal proposition**. Theoretically, partnerships might be "interorganizational relationships" (Van de Ven, 1976). Practically, universities and districts collaborate, but people act on their behalf (Hord, 1986; Houston, 1979). Partnerships cannot function without participants interacting positively. Successful collaboration rests on commitment, cooperation, respect, camaraderie, flexibility, and dialogue. Collaborators must establish an atmosphere that promotes positive interpersonal relations. Once participants communicate openly, share responsibility, and value each other, they can generate changes that impact the institutions they serve.

Second, collaboration is a "**messy**" process. By definition, collaborators share decision making for governance, planning, delivery, and evaluation (Schaffer & Bryant, 1983); they assume many possible roles and create varied structures (Ward & Tikunoff, 1982). Problem solving teams set a target, but rarely predetermine the means to reach it. Collaboratives evolve and are almost organic.

They defy product labels, agendas, acronyms, and packaging. Ambiguity, uncertainty, and large doses of confusion often accompany partnerships.

Successful collaboratives, moreover, are **long-term operations**. Participants must enlist "for the duration," then persist to produce meaningful results. For collaborators, patience is a virtue. Partnerships, moreover, proceed through stages; they often assume a cyclical quality as events cause certain phases to reappear. Trubowitz (1986) maintained that a typical collaborative demonstrated eight stages; I might quibble with his terminology, but find his model basically correct. Trubowitz' major contribution is his insistence that "hostility and skepticism" and a "lack of trust" characterize the start of any collaboration. Universities and schools possess different expectations, climates, reward systems, and governance structures; professors and teachers usually meet in college classrooms, where their relationships are more adversarial than mutual. Inhabitants of two very different social systems often need time to realize their commonalities and learn to relate collegially.

Finally, though time-consuming, frustrating, messy, and intensely personal, partnerships are **powerful change agents**. In schools, collaboration reduces teacher isolation, boosts intra-building communication, promotes teacher independence, builds teachers' research skills, and provides incentive to use these tools. At the university, partnerships add realism and credibility to methods courses, transform the professor-graduate student relationship, offer settings for research, and renew faculty professionally. I have observed these results too often to dismiss them as the claims of uncritical advocates. Why do such transformations occur? Participants "get hooked" in a partnership; become willing to trust their peers and the process; open themselves, and grow. Eventually, the institution must change to accommodate these significant personal adjustments.

The Perils of Partnership

Because of their intimacy, messiness, duration, and power, school/college relationships contain built-in obstacles that every team must negotiate. Foremost among these pitfalls is **politics**, defined here as activity involving competition for resources, organizational conflict, advancing personal agendas, and reaction to change. Politics seems to flourish in partnerships, perhaps because of their personal quality. Politicking arises from several sources: a partnership might lack adequate funding; a participant might join a collaborative with a preset mission; members might come burdened with personal "baggage" they want the team to carry. Unchecked, political activity attacks a partnership's lifeblood; it lessens communication among team members, limits their ability to work cooperatively, and closes a climate for change.

Like politics, thoughtless language can restrict communication, thereby inhibiting school-university collaboration. School and college faculty both speak "educationese," but in dialects strange to each other. Neutral words in one environment, moreover, have unexpected power in the other. I remember an incident from my earliest partnership that illustrates the negative impact that careless language can have. I approached a teaching staff with the proposition that we could work together to "solve their school's problems," a friendly mood suddenly deteriorated and I was told that the building had no **problems**, at least none that a professor could ever comprehend. Organizers might never realize dreams for a partnership if they speak words that threaten or overuse technical jargon. Collaborators must appreciate the rituals, expectations, and language of all team members before their venture can succeed.

A third pitfall confronting any partnership is **resources**. Collaboratives typically need money and embark on a continual search for finances. More crucial than funding, however, is the quest for time. Team members juggle schedules, recruit volunteers, and borrow minutes from planning periods for collaborative work. Why are resources such a major hurdle? The answer lies in collaboration's apparent newness and unproven performance. Fiscal administrators have scant reason to make room in overcrowded budgets for an "emerging phenomenon." Consequently, partnerships struggle for release time, travel money, materials, and training allocations, particularly in their early stages.

Finally, governance poses a thorny issue which collaborators must resolve. A partnership is a hybrid. By definition, school and college combine to solve a mutual concern; both parties contribute resources and share decision making. A collaborative team, moreover, requires a certain independence to be effective; the partnership must have the right to choose appropriate courses of action and feel responsible for them. Mutuality, independence, and responsibility, however, inevitably raise issues of authority, chain-of-command, and jurisdiction.

Essential Elements for Effective Collaboration

No one can guarantee that a partnership will avoid pitfalls to produce significant change. Collaboration is a risky business. Still, organizers can maximize chances for success by incorporating nine elements in their collaborative projects.

Time. Collaborators must remember that unlike the cobbler and the elves, they cannot expect to awaken one morning and find their goals reached overnight. Trust and cooperation take time to build; instructional problems are persistent and complex. Any collaboration must include ways to free participants from routine responsibilities. In the short term, professors and school administrators can cover teachers' classes; student teachers can free their mentors for partnership

meetings. Yet, stop-gap measures will not sustain a collaborative in the long term. The team must discover funding sources for release time and/or extra staff. Forcing participants to collaborate on their own time is the quickest route to burn-out.

Perks or Payoffs. I have stressed the fact that collaboration consumes participants' time and drains their energies; the process is ambiguous and can leave even the staunchest advocates frustrated. The partnership should provide release time and pay for program development, travel, or a recognition dinner.

Administrative Support. Collaboration is a "grass roots" process. Yet, a partnership will not exist long without "blessings from above." Organizers should obtain permission, good wishes, and resources from their respective chief operating officers (the school superintendent and, at the least, education college dean). If at all possible, engage these figures in the collaborative--the more visible their involvement, the better. Administrative support, moreover, should be formalized in some way; a co-signed memorandum outlining the partnership's terms and conditions would be ideal.

A Core Group. Ideally, a collaborative team should have eight to ten members drawn from college faculty, teaching staff, district administration, parents, and support personnel. Larger groups become unmanageable and discourage the intensely personal interaction a partnership demands. The change unit, moreover, should be an elementary building or secondary department for the same reasons. An ambitious project might integrate multiple teams or utilize a cadre group to spread its message to other sites. Still, an effective collaborative concentrates on effecting big changes in small packages.

Collegiality. Collaborators can avoid most perils by encouraging mutual respect and opening the partnership to input from all participants. A first step in obtaining this mutuality is a frontal assault on traditional teacher-professor roles. This relationship reflects a professional hierarchy in which status, power, and wisdom reside with the professor. In a partnership's early stages, however, organizers must establish a working environment in which this antiquated social order no longer applies. The quickest way to accomplish this transformation is to practice role-reversal whenever possible. Let teachers lead action-research projects and/or place professors in the classroom as aides. Avoid operating procedures in which professors or administrators issue directives teachers rush to complete.

A Mission. I agree with Lieberman (1986) that activities, not goal statements, propel a school/university relationship initially. At the same time, "action for action's sake" only sustains a partnership so long. Participants will not tolerate collaboration's high energy level without a meaningful target for their efforts. At the earliest opportunity, a team should embrace a common purpose; this vision will drive a collaboration in its later stages.

A Model. Admittedly, partnerships must evolve in unexpected directions. Organizers cannot lock-in agendas or preset outcomes. For collaboration to be productive, however, growth must be channeled somehow; participants cannot proceed randomly or stray too far from the mutual target. Organizers should adopt a structuring process to focus efforts. I have found a consultative problem solving model to be very helpful. In this approach, team members describe their school to a neutral observer, characterize the audience(s) they serve, state their instructional mission, list factors blocking its achievement, target an obstacle which the team can realistically tackle, survey available resources, design a strategy to remove the targeted obstacle, and implement this plan. This model focuses team energy, but does not restrict their creativity.

Training. I began my collaborative career convinced that participant training wasted valuable resources. A partnership simply happened; the best organizational tactic was leaving participants alone. Four years as a participant/observer leave me questioning this belief. Collaboration demands large quantities of communication, cooperation, and trust. Organizers cannot guarantee that team members possess these qualities, but they can nurture interpersonal skills that make their emergence more likely. Training educators in conflict resolution and active listening, for example, would facilitate the collaborative process.

A Sense of Reality. A final element that enhances a partnership's chances for success is a pragmatic approach to enlisting recruits. Like the Marine Corps, collaboration requires "a few good people"--educators who open to others, adapt to new conditions, and communicate effectively. Frankly, these qualities are not universal in our profession. Many teachers and professors have them, but many do not. Training promotes these traits, but cannot supply them. Participants uncomfortable with ambiguity and intensity should transfer to other projects. People who abstain from a partnership or withdraw from the collaborative arena should be praised for recognizing their limits, not condemned for showing weakness.

Advice, Not Absolutes

School/college partnerships are powerful change agents. They can open communication, broaden attitudes, streamline organizational patterns, introduce instructional alternatives, professionalize teaching staffs, involve academics, generate research projects, and invigorate the "burnt-out." Collaboration's power stems from its nature. The process is intensely personal, evolutionary, open-ended, complicated, and long-term. To continue a partnership, participants must become dedicated to it. Committed people produce meaningful change.

While collaboration is powerful by nature, participants must overcome a series of obstacles inherent in any partnership. They must choose words carefully, avoid

political entanglements, secure a resource base, and specify governance procedures. Collaborators must recognize that collaboration is a rewarding, but tricky undertaking.

My purpose has been to describe the process, discuss its pitfalls, and share nine elements which minimize problems. This practical information, gained from four years as a "known collaborator," should help educators implement productive school/college relationships. Yet, by design I did not list my suggestions in priority order or frame them as guidelines to follow. Collaboration is too delicate a dish to be cooked by recipe. Collaborators must feel the way and evolve a plan based on the conditions they encounter. My recommendations are not answers or absolutes; they do alert partnership organizers to issues they must resolve to achieve success. Given patience, flexibility, cooperation, and courage, school/university collaborators can greatly improve teaching and learning in America's schools.

References

Goodlad, J. I. (1987). Schools and universities can--and must--work together. *Principal, 67,* (1), 9-15.

Hord, S. M. (1986). A synthesis of research on organizational collaboration. *Educational Leadership, 43,* (5), 22-26.

Houston, W. R. (1979). Collaboration--see treason. In G. Hall, S. M. Hord, & G. Brown (Eds.), *Exploring Issues in Teacher Education: Questions for Future Research.* (pp. 331-348). Austin, TX: Research & Development Center for Teacher Education.

Intriligator, B.A. (1983, March). *Evaluating interorganizational relationships.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Lieberman,A. (1986). Collaborative work. *Educational Leadership, 43,* (5), 4-8.

Schaffer, E. C., & Bryant, W. C. (1983). *Structures and Processes for Effective Collaboration among Local Schools, Colleges, and Universities. A Collaborative Project of: Kannapolis City Schools, Livingstone College, and the University of North Carolina-Charlotte.* Raleigh, NC: North Carolina State Board of Education.

Trubowitz, S. (1976). Stages in the development of school-college collaboration. *Educational Leadership, 43,* (5), 18-21.

Van de Ven, A. H. (1976). On the nature, formation, and maintenance of relations among organizations. *Academy of Management Review, 1,* (4), 24-36.

Ward, B.A., & Tikunoff, W.J. (1982). *Collaborative Research.* Washington, D.C.: National Institute of Education. (ERIC Document Reproduction Service No. ED 221 531)

Wilbur, F. P., Lambert, L. M., & Young, M. J. (1988). *School-College Partnerships: A Look at the Major National Models.* Reston, VA: National Association of Secondary School Principals.

Summary

It would seem that we cannot avoid, even if we wanted to, a future which will demand greater collaboration globally. The same seems true in education as part of that global picture. In order to reap the benefits of collaborative enterprises, however, we must delve deeper into the nature and the many meanings of collaboration. We must take advantage of the theoretical constructs and practical methodologies that already exist and apply them to educational endeavors where possible. I believe we have seen some examples of this in the previous presentations.

Being able to study the processes one is engaged in, however, requires an objectivity not easily achieved. We do have at least one discipline that can assist us in this enterprise, one not mentioned or applied directly to any great degree here, and that is cultural anthropology. Only after years of resistance have the qualitative methods of the cultural anthropologist become accepted by the educational community as valid and useful tools of research. Ethnography, case study, key informant interview, participant observation, and grounded theory are each examples of terms or phrases which had very limited acceptance in past years. In focusing our study on the process of collaboration, we are only one step removed from the study of behavior, and instead of the goal of "thick descriptions" of one culture or subculture, we are bent upon describing how two or more subcultures cannot only understand each other, but can communicate for the satisfaction of common ends. In attempting to facilitate collaboration, we do not seek to change subcultures or to integrate them, but in a pluralistic sense, we must maintain their integrity and strength which reside in their differences. Again, we pose the question as we did at the beginning: How can we discern, depict and interpret the ingredients, the requirements of collaboration, and thereby better understand its nature? It seems that those who study cultures may have much to offer in guiding our future efforts.

Chapter Two
Implementation Strategies: Policies and Procedures

Fannie Wiley Preston, editor*

Collaboration is a recent phenomenon that goes beyond cooperation to mean equality among all participants and liaisons at the interface of all levels of the organizations. It is an attitude, a process, and a method. When institutions collaborate they share decision making in governance, planning, delivery, and evaluation of programs.

Collaboration is central to educational reform. If all those who have a stake in the educational enterprise work together--sharing the power, the decision making and the responsibility, and pooling their expertise and resources--better programs and/or long-term solutions to critical educational problems will result.

Common educational agendas and purposes are essential to effective collaboration. However, once the nature of the problem, the concept to be jointly addressed, is identified and the common agenda established, effective implementation strategies, policies, and procedures are needed in order to move from thought to action.

The second strand for the 1989 AACTE annual meeting was titled "Implementation Strategies: Policies and Procedures." It provided the bridges between problems and solutions, as well as the basis for generating principles to guide future actions. Toward this end, participants were directed to study the practical and historical characteristics of successful partnerships. Several of these papers, representing the range of problems, policies, and procedures, are featured in this section. Before moving on, it is useful to summarize briefly the presentations that focused on this theme. The papers presented in this strand addressed problems in the following categories:

Fannie Wiley Preston is the Associate Dean for Academic Affairs and a Professor of Education at San Francisco State University. She has worked extensively in field-based collaborative projects and during the 1988-89 school year, she directed a grant to plan clinical training schools for the San Francisco Unified School District. San Francisco State University was one of eleven universities in the United States selected by the Ford Foundation to test this new approach to training future teachers. Her research is in the area of effective teaching of reading/language arts.

TABLE I

CURRENT PROBLEM/ISSUE	COLLABORATORS	STRATEGIES (EXAMPLES)
HIGH SCHOOLS		
How to improve a low-achieving high school: high drop-out rate, high minority population	School district, university	Twenty-one research studies as a basis for a comprehensive needs assessment
1) How to improve the minority experience at the post-secondary level	School district, university	Early intervention by using a special high school curriculum
2) How to improve the minority experience at the post-secondary level	Multi-institutional collaboration: 17 higher education institutions	Multi-institutional collaborative program mix
SCHOOL CURRICULUM		
How to improve elementary science education	State department, higher education	Study panels of science educators and teacher educators to synthesize and translate research findings and establish framework
How to improve geography education	School district, higher education, business, professional societies	Nationwide network of state-level centers
PRESERVICE INSTRUCTION		
How to establish a network of exemplary elementary and secondary schools to train teachers; to improve teacher education	Legislated collaboration; state governing boards, higher education school	Framework to guide the work of task forces and advisory committees; state divided into eight regions: mandated professional development school, pilot programs implementing the legislatively madated professional development school

CURRENT PROBLEM/ISSUE	COLLABORATORS	STRATEGIES (EXAMPLES)
THE INDUCTION YEAR		
How to assess collaborative spinoffs from a teacher internship program; to implement support services for new teachers	School district, university	"Help line" and resource bank for new teachers, resource packets, professional development plan, use of statewide observation system, research on spin-off collaborative projects
UNIVERSITY CURRICULUM DEVELOPMENT		
How to improve the teacher education curriculum by integrating the construct of pedagogical content knowledge as the basis of teaching	Subject matter specialists, teacher educators, public school practitioners	Interdisciplinary collaboration, teacher education council, instructional triads
COLLABORATIVE DECISION MAKING		
How to determine when power should be shared; how to determine the risks and benefits of collaboration	Generic--across any combination of groups	A model for determining who should be involved in making a decision and to what degree

The third major symposium, "Using the Knowledge Base for Beginning Teachers: Emerging Models of Collaboration," was also concerned with the theme of Implementation Strategies. A brief summary of this session, which focused on the recently published AACTE book, *Knowledge Base for the Beginning Teacher*, follows.

Dr. William E. Gardner, past president of AACTE, reported that the Knowledge Base Action Group (KBAG) was formed by AACTE as a part of the Center for Change in Teacher Education. The group's charge was to help AACTE define what appropriate activity should be undertaken by the association in the area of defining the knowledge base for teaching.

This action group decided to commission a book about the knowledge base in order to place AACTE in a leadership position in the movement to define, to accentuate, to push for the identification of a knowledge base in teacher education. The intent was to make a statement about the knowledge base for beginning teachers and, in so doing, start a process. The book put forth what is believed to be a comprehensive definition of the knowledge base for beginning teachers. It was designed to make a state of the art comment on teacher education, a comment that was not constant but rather a reflection of a point of view which changes with the creation of new knowledge and new technology.

In order to ensure that constant revision takes place, the first action group is now out of existence. The board of AACTE has created KBAG II, a new action group charged immediately to begin an assessment of the content of the *Knowledge Base for Beginning Teachers* and to revise the volume on a three-to-five year basis, at least to plan a revision of the book.

The knowledge base book is a "what" book to the "how" of teacher education. It does not speak to how teacher education ought to be done. The book puts together a large store of ideas which need to be transformed into curricula, transformed into the "how" of teacher education or the content of the field in which we work. During the third major symposium, "Using the Knowledge Base for Beginning Teachers: Emerging Models of Collaboration," presenters reported on initiatives to use the knowledge base book in collaborative efforts to design teacher education curriculum and to deliver instruction.

Exxon Education Foundation funded seven projects to explore the implications of the knowledge base book and how it might be used in various collaborative arrangements at a number of universities. There were seven projects funded: Michigan State, Whitworth College, the University of Delaware, University of Illinois, University of Minnesota, the University of Wisconsin, Milwaukee, and City University of New York. Reports from two of the projects are included in this chapter.

Institutions of higher education, school districts, the legislature, the California Department of Education, and the business community are jointly addressing the problems facing urban elementary, middle, and secondary schools: the recruitment and retention of competent teachers, particularly minority teachers; reform in teacher education curriculum; and the success of minorities in higher education institutions. If this self-renewal of the profession is to result in lasting reform, ongoing projects must be codified, institutionalized, reported in the literature, and used as a basis for building networks. We must push forward the frontiers of what we know about collaboration in order to enact reform in schools and schooling.

References

Reynolds, M. C. (Ed.). (1989). *Knowledge base for the beginning teacher.* New York: Pergamon Press.

Featured Speaker

This chapter opens with an edited version of the remarks by the major speaker representing this strand, W. Ann Reynolds, Chancellor of the California State University. The California State University is a network of nineteen universities that educate the majority of teachers in California. According to Dr. Reynolds, teacher education is center stage once again. This focus on teacher education is resulting in more respect for teachers and what they do and has created an opportunity for fundamental change. Teachers, working together collaboratively and cooperating with all agencies concerned with educating teachers, are in the best position to find solutions to today's educational problems.

Peggy Pedagog Prevails

W. Ann Reynolds
Chancellor, The California State University

Last year in remarks before his board, Harvard President Derek Bok asked an important question. He asked why should teacher training programs be "relegated to the margins of the university, fighting for their existence at a time when they should occupy center stage in the national effort to improve our public schools?" President Bok's question points to a new awareness that the only way our nation's problems can be solved is by reemphasizing the importance of teaching. Our teacher preparation programs should not be on the margins. They should, rather, be at the very center of the university's efforts.

When I was attending Kansas State Teachers College, we produced an annual event which took place at homecoming: the crowning of Peggy Pedagog. This honor was arguably the most significant that a young woman attending our university could receive. Each year one of our teacher education students--generally one who was going on to be an elementary school teacher--was selected to be crowned as Peggy. The publicity and attention which went with it were enormous. It was, quite honestly, unequalled by any other event on campus, and was representative of the very high esteem in which teachers were held, and the great respect felt for teaching as a profession. In those days, when you graduated from teachers college, you were recruited from all over the country. It was much like receiving an engineering degree today.

Unfortunately, in the years that followed my graduation, respect for teaching--and the teaching of teachers--declined dramatically. This produced a decline in the enrollments in teacher education departments, and quite honestly, a decline in the academic quality of those who were seeking teaching credentials.

Today, for the first time in several decades, we are starting to see a fundamental change. I think we are seeing a renewal of respect for teachers and for those

who train them. And while the notion of crowning a Peggy Pedagog may seem a bit too sexist for this day and age, I nevertheless believe--at least in spirit--that we may once again see Peggy return to life on many of our campuses. Teacher education is once again "in" and that is good news for all of us.

The Problem

Unfortunately, when you read the headlines of our nation's papers, the problems confronting teacher education are portrayed as massive and perhaps even unsolvable. When dissected, however, it is clear that there are workable solutions, and not surprisingly, teachers are the ones best positioned to provide them. To be successful, however, we must look past the headlines and beyond the conventional wisdom.

Conventional wisdom says that today's teachers are poorly prepared and that multiple-choice tests are necessary for assessing teachers. Headlines cry out that illiteracy is out of control and that it will only get worse. Conventional wisdom says that Black and Hispanic students are doomed to second class status, while Asians are portrayed as a "model minority" that simply can't fail.

Teacher Testing

Those who suggest that a paper and pencil test is the best measure of a potential teacher are elitist or naive, uninformed or all of the above. Standardized exams are a poor substitute for the insight and experience of well-trained professors whose judgments can be coupled with those of outstanding practitioners.

The judgment of university faculty and field practitioners is also a better source for evaluating a prospective teacher's knowledge of the subjects that he or she will teach. No paper and pencil test can measure the personal traits of love of humanity, trust, and ability to engender in our children the courage to experiment.

In line with this, The California State University (CSU) faculty will be involved with the state in developing subject matter performance demonstrations that are designed to supplement the National Teacher's Exam (NTE). Can someone who wants to teach art actually draw? Can someone going into biology actually perform an experiment? Those skills need to be demonstrated. They cannot be measured on a multiple-choice test. In addition, at the CSU we have adopted a policy which calls for faculty in academic disciplines to assess the adequacy of a prospective teacher's knowledge of the subject that he or she will teach.

In California, a new law--SB148--provides for future alternatives in the evaluation of teachers. As alternatives to selecting "A," "B," "C," or "None of the

Above," it allows for university assessments, classroom performance assessments, and other evaluations that call for a demonstration of mastery of knowledge and pedagogy.

On the national level, I am heartened to know that the Educational Testing Service (ETS) has announced a whole new direction for the NTE. By 1992, the paper-and-pencil exam will give way to a package of tests that use computer simulations, interactive video, portfolio development, and classroom observations. ETS is starting to acknowledge in part what our profession has known all along!

Minority Participation in Teaching

This new direction on the part of ETS is very important, because the cultural bias of many standardized tests is keeping far too many minority students out of college generally and out of teaching in particular.

The passing rates for NTE first-time test takers in California are very telling. Seventy-two percent of the whites who took the general knowledge test passed. This compares to 46% of Pacific Islanders/Asian-Americans, 44% of Mexican-Americans, and only 29% of African-Americans. Similar results are found on the California Basic Education Skills Test (CBEST), an exam which is California's version of the basic skills test. On the CBEST we see 81% of whites passing, compared with 59% of Mexican-Americans and 34% of African-Americans.

A report prepared by PACE (Policy Analysis for California Education) has concluded that this state will need 160,000 new teachers between 1987 and the mid-1990s in order to meet anticipated enrollment growth and attrition. This comes at a time when ethnic minorities constitute an ever-increasing percentage of our population. In Los Angeles County, 70% of the public school children are classified as ethnic minorities. These students need role models in the classroom, yet the number of minority teachers in our public schools is declining.

Correcting this is one of the greatest challenges before all of us associated with AACTE. But it is a challenge that we can meet. Good programs are being developed. We need to make the public aware of their success so that we can garner support to expand them. A good example is a wonderful program aimed at bringing more minority students into teaching that is underway at Crenshaw High School in Los Angeles. Crenshaw is an inner city high school which for a number of years had the usual crime, drug, and gang problems associated with an urban neighborhood. For many of the students at Crenshaw, gang members were the most visible role models. Then a new principal came along--her name is Jewel Boutee--and she initiated some very innovative programs to change all

that. The most significant, at least for our discussion today, was the formation of the Future Teachers Club.

Where I grew up in the midwest, children interested in farming joined 4-H clubs or Future Farmers of America. In our inner cities, it makes the same kind of sense to encourage students to pursue teaching by getting them interested through a club that carries with it a certain prestige. And now, being a member of the Future Teachers Club carries status, and the members stand out as role models for others.

The California State University, Los Angeles, is currently working in partnership with Crenshaw and their future teachers in a program called the Teacher Academy. In this program, our professors interact directly with students in the Future Teachers Club and guide them in tutoring junior high and elementary students. These tutoring activities, in combination with information and counseling, serve to ignite an interest in teaching while also providing an awareness of the academic preparation which is necessary for success.

The results at Crenshaw have been promising: 90% of the students in the program in 1988 have been accepted at four-year institutions. Crenshaw was a high school that could have been abandoned by the teachers who worked there. Instead, it is becoming a wonderful training ground for future teachers.

The Crenshaw partnership is just one example of the many efforts we have undertaken to reach out to high schools and community colleges to attract more teachers. We are just now initiating Teacher Diversity Grants, which will allow our campuses to work with high schools and community colleges to encourage and support minority students who want to become teachers. We plan to provide $1 million in grants next year for this program.

Addressing Diversity

If we can succeed in bringing more minority students into teaching, it will be our most important accomplishment. But outreach programs by themselves are not the only answer. The ethnically diverse students who now fill our classrooms are bringing broadly different backgrounds and expectations to the classroom, and as a result they are going to respond quite differently to various teaching methods and learning stimuli. As a result, universities must provide teachers with pedagogical methods that work for all students, particularly African-Americans, Hispanics, and Asians.

In late January of this year the CSU co-sponsored, along with State Superintendent Honig and the California Department of Education, a conference that attracted more than 100Black educators and legislators in order to help establish

a Center for Applied Cultural Studies and Educational Achievement. The Center will conduct research that is designed to develop teaching methods that will better reach African-American children. We know that some schools and some teachers are highly successful in motivating and educating African-American youngsters. It is critically important to discover the factors that underlie their success, and to see if they can be replicated in other situations.

We are continuing to develop culturally relevant teaching practices, for they may well be the key to bridging the gap that so often exists between teacher and learner, and which has created such an obstacle for so many Black and Hispanic students. Our approach continues to be practical, classroom-oriented, and aimed at the interaction between teacher and learner.

Support for Teachers

Several weeks ago I was reading the very captivating autobiography of journalist William Allen White. White grew up during the 1860s and 1870s in the same corner of Kansas that I once called home. Of that time, he wrote that "all over the Missouri Valley, the settlers first built a sizable schoolhouse and then built their towns around it." In those days, teaching was a fairly simple profession.

Today, the teachers we train face many difficult challenges. In many school districts 40% of the new teachers quit after the first year to pursue another occupation. Such an overwhelming exodus should signal loud and clear that these new teachers need support. An important task for colleges of teacher education is to provide that support. We can't just create teachers and toss them to the wolves. We have a responsibility to help them succeed. At the CSU we have started a program called the Beginning Teacher Retention in Inner City Schools Program.

The program is operated in partnership with the State Department of Education and is based on the concept that new teachers need to be inducted into the teaching profession; and, that the process of educating teachers is continual and should extend, at a minimum, into the first year of teaching. Beginning teachers participating in this program receive on-going supervision from university faculty as well as assistance with subject matter concerns from faculty from academic departments. Perhaps most importantly, new teachers receive on-going coaching from experienced classroom teachers. An evaluation of the first year of the program at CSU/Hayward and at San Diego State shows retention rates of 90%, which far exceed the retention rates of new teachers in urban areas elsewhere in the United States. By the end of their first year of teaching, the new teachers in this program were found to be performing as well as experienced and highly

successful teachers. This program is successful, I think, because the university is involved. Universities need to be active in these efforts.

We are now seeing top students enter our teacher colleges, and we are finally gaining support for the ways in which they should be evaluated. There is a renaissance occurring in teacher education and you all have an active role to play in it.

At the CSU we anticipate enrollment growth of 186,000 students over the next fifteen years. A good many of those new students are going to pursue teaching careers. To educate them, we are going to need thousands more professors. The CSU is not alone in this. There is a pressing need for more people to pursue education doctorates, both to teach and to serve as leaders for our schools.

Conclusion

We are seeing a new and exciting invigoration of American teaching. There is growing new respect for what we can accomplish. This is an exciting time to be part of a college of teacher education. We can change the very fabric of our society. Through the collaboration and cooperation among all agencies concerned with educating teachers, we can assure, to my great delight, that Peggy Pedagog prevails.

Selected Papers

The papers in this chapter identify current problems, indicate the intervention strategies (plan of action, procedures and/or methods used) to solve the problem, and describe the management plan. In addition, the papers directly or indirectly suggest guidelines, principles, and practical wisdom that emerge from the implementation that can contribute to the success and/or institutionalization of the collaborative program.

Transforming the Knowledge Base into Teacher Education Programs

Henrietta Barnes
Michigan State University

The Exxon Project at Michigan State University consists of two phases. In the first phase, participants examined the knowledge base that is critical for beginning teachers. We brought together a group of educators who had written extensively on the knowledge base and a group of urban elementary school teachers. The participants met twice a week and discussed their conceptions and applications of the knowledge base; of what experienced teachers know and how they use it; and, of what teachers' and teacher educators' views are regarding what beginning and experienced teachers need to know. We wanted, also, to reflect on the processes that teachers go through in learning this knowledge base. Finally, and most important, we wanted to see where our two sets of conceptualizations overlapped, and where we held differences.

This meeting format provided an exceptional opportunity for collaboration. It was made possible because these teachers have been collaborating with the elementary teacher education program at Michigan State University for over five years. The teachers are in a very real sense mentor teachers for our beginning teachers, who spend two years in elementary classrooms, including one full year at this particular school site. Through this program, the teachers were able to be released from their classrooms two half-days each week. Because of the long-term relationship that our student teachers have developed with their students and classes, the participating teachers were confident that their students would receive high quality instruction in their absence. The teachers thus felt a high degree of freedom to involve themselves more fully in the meetings.

In this first phase of the project, we chose to read, discuss, and critique six chapters. These six chapters included one on subject matter knowledge, which included an address to the teachers by Suzanne Wilson; one on teachers assuming an active role in learning, which was discussed with Anne Marie Palincsar, one of the authors of that chapter; two chapters on learning and learners, and classroom instruction, both of which Linda Anderson had authored;

"The Social Organization of Classrooms," written by Susan Florio-Ruane; and "Subject-Specific Pedagogy: Why Studying One Chapter Ahead Doesn't Really Work," by Bill McDiarmid and Deborah Ball. These readings encouraged a dialogue and exchanges that proved both exciting and revealing, and which brought our own perspectives to new levels of understanding.

One of the most outstanding topics of discussion focused on domains of knowledge. The teachers found it difficult to talk about domains of knowledge in isolation from each other. While they may have learned about these domains in separate ways initially, it has been a long time since they have thought about them separately; to do so seemed artificial.

It was also reinforcing for us to recognize that what we have learned through this project is what we are reading in the current literature: The domains of knowledge that teacher-practitioners use are integrated into networks of understanding that are interacting all the time. These domains are contextualized, and the knowledge base from which one draws and the domain one might use in any given situation depends on the particular learners, the particular context, and the particular goals and intentions that the teachers are attempting to achieve at a particular time.

In talking with us about how we university practitioners might prepare our student teachers, the elementary teachers wanted us to do more to integrate these domains within our own instruction. They felt that our student teachers came with a degree of understanding about how various knowledge domains are integrated in practice, but they are obviously less sophisticated than experienced teachers. However, the teachers felt that beginning teacher knowledge was, and needs to be, essentially the same as experienced teachers' knowledge: that there is a core of knowledge that these new teachers must possess and begin to use. Clearly, there will be differences in the level of understanding and in the magnitude of repertoires that teachers have that they can draw on for interpreting situations, for creating alternative representations of subject matter, or ways of responding to situations. Nevertheless, they reminded us that beginning teachers face exactly the same dilemmas that experienced teachers face. Student teachers must, therefore, finish their training with a degree of mastery in how these domains interact in particular contexts, and how they can be applied. Coming into student teaching knowing only about domains is insufficient. Student teachers need to know how these domains interact.

In relation to this topic of knowledge domains, the teachers expressed concern that student teachers come into their training with much of what they know in a decontextualized state. How can student teachers integrate and apply this often fragmented, decontextualized formal knowledge? How can they develop and use the limited conceptual tools that they possess for understanding practice and

context? How can the issues of professional roles and responsibilities be made central to their self-conceptions?

The teachers suggested that we do more to allow novices to see examples of good teaching. They want novices to work more with teacher educators--and I include here both teacher educators from the university and from the schools--who can demonstrate effective teaching with children. Novices need comprehensive guidance from someone who can interpret and contextualize their intentions and actions. They need someone who can talk about, articulate, and justify their actions from among a whole range of alternatives from which they might have chosen. They need someone who can encourage and guide them through critical reflection and study. In fact, what they would like to learn better themselves, and encouraged us to learn more about, is how to make more visible the intellectual activity of teaching. All of this, I think, is consistent with many of the views that are addressed in the knowledge-base handbook.

The second phase of the project is of a different sort. It has to do with collaborations among twelve large midwestern universities who are engaged in reform efforts. These efforts include faculty, department chairs, and deans who are attempting to understand the whole process of transforming the knowledge base into programs and curriculum. We want to identify where the difficulties are, and define what the issues and questions are that educators and practitioners need to address. We want to understand the difference between a problem or a difficulty, which probably has a solution, and a dilemma which requires trade-offs. With these in mind, our group looked at the interaction between the curriculum and the context, and the ways in which the context prevents, inhibits, or limits the integrity of the curriculum.

We examined this question from five different perspectives that emerged from both the research literature and from what was happening in the various institutions. A conference was held at Michigan State in the fall where we explicated these perspectives, and then used them as screens through which we could examine the reform efforts that were underway at these institutions. The five screens focussed on 1) the knowledge base, 2) conceptions of learning to teach, 3) program structure, 4) organizational change, and 5) leadership. Using institutional cases, we then talked about the teacher education curriculum that these institutions were attempting to construct. Several questions guided our discussions: What is the core, critical knowledge? What do faculty perceive to be the best ways for novices to learn this core knowledge? What program design elements are essential? How can leadership qualities be made most effective within such contexts and program changes? What is there about change and transition that we should understand? Through networking and sharing experi-

ences and ideas, we believe that we can provide support for each other, we can learn from one another, and we can inform the larger community about the difficulties involved in transforming knowledge into a program.

I would like to end with some comments made by David Cohen, who talked with our group. He reminded us that change is a very long-term process--we must think ahead thirty years, not three-- and it is time that we gave ourselves a time frame for success that won't jerk us back and forth between this effort and that effort. We are struggling with how to move away from piecemeal attempts to improve the effectiveness and quality of teacher education. Along the way, we will encounter the difficulties inherent in providing a coherent, comprehensive curriculum of professional education. How do we get a long enough time frame in order to bring together all of these pieces into some kind of comprehensive reform?

Very, very difficult. As David Cohen says, "We are at the beginning of a revolution, not the end, and strategies one uses at the beginning need to be different."

The Academic Major for Elementary Education Students: A Collaborative Project Between Faculty in Education and Arts and Sciences at the University of Delaware

Frank B. Murray
University of Delaware

Everyone agrees, whether they are reform minded or not, that teachers--regardless of what else they know--must know the very subject matters they hope to teach their pupils. Yet in the case of the elementary school teacher, we are hard pressed to follow the implications of what we believe because it would mean that prospective elementary teachers would need to be well-grounded in mathematics, literature, writing, history, geography, the natural and social sciences, the fine arts, language, and much more. What kind of academic course of study could ever lead to such an outcome in today's university--for everyone, let alone for education students? This is the question that some members of the University of Delaware's faculty in education and several arts and science departments have taken up.

How does the elementary teacher come to know the very material he or she teaches and, given the latitude in the elementary school curriculum, how do teachers even figure out what that material should be? We do know that reasonably well-educated college and university graduates find themselves in great difficulty early in their attempts to answer coherently, and with integrity, the questions that young children are likely to put to them. Sooner or later an elementary school teacher is going to tell children that the world, despite all appearances, is not flat. Upon learning that the earth is round and spinning, children will inevitably wonder why they don't fall off. Teachers, and virtually all educated persons, will say something about the holding power of gravity, and having said that, they have exhausted about all that they know about this topic. They have no intellectual resources left to deal with other questions about gravity, such as whether gravity is stronger on the earth's bottom where it has to do so much more work to keep everyone from falling off, and so forth. In fact, there is some risk that gravity will be said to be a magnetic force, which it is not, and thus the pupils are misled about a point that will need to be corrected if the pupil is to have even a rudimentary grasp of how the universe operates.

Even more to the point is the case of a recent National Science Foundation video in which some of Harvard's graduating seniors--at their commencement--were asked how it is that we have seasons. Without hesitation and with confidence, they each replied incorrectly that it is because the earth is closer to the sun in the summer and farther away in the winter. Yet each would no doubt know the distance between the earth and sun, that days are of different lengths, the shape

of the earth's orbit, that the seasons differ by hemisphere, and so on--all facts, that upon reflection, are inconsistent with their response. The point is that the nation's best and brightest are not themselves well-grounded in an essential, but relatively simple, part of the elementary school curriculum. It would not be hard to document that gaps like this exist among our best and brightest in all aspects of the elementary school curriculum! Given this outcome, what hope is there for the elementary education major--who is typically not a high scorer on any of the common standardized measures of intellectual aptitude and achievement--to master even the subject matters of the grade in which they expect to teach? What kind of education, as only one component of a modern teacher education program, could provide the grounding in the basic subject matters that would allow teachers to stand up to the ordinary questions that they will receive from their pupils, let alone the exotic questions that would tax scholars in the field? How often can the teacher simply say, "Good question, look it up," before they discourage all genuine questions from their pupils?

At the University of Delaware, with grant support from the Exxon Foundation and Carnegie Corporation of New York (Project 30), we have a team of faculty leaders who are considering six proposals for the reform of the arts and science component of the teacher education program that we offer prospective elementary teachers. The team members are the chairs of the Departments of English, Mathematics, History, Philosophy, Curriculum, and Instruction; the Associate Chair of Chemistry; the Associate Dean of the College of Arts and Science; and the Dean of the College of Education, who chairs the group. Currently our students take a modest number of basic arts and science general education courses, about one-quarter of their total program, plus the equivalent of a minor in a field of study outside education.

The team is exploring six approaches to the question of the elementary academic major. These are not mutually exclusive, so the final outcome could very well include features from each approach.

1. Interdisciplinary major. At present we are viewing this option as a collection of reworked minors in six areas--mathematics, foreign language, history and social science, English, natural science, and fine arts. Apart from the fact that each minor would be responsive to the unique requirements of the elementary school teacher, this option is fairly conservative and administratively feasible. It represents about 90 credit hours of focused study, a considerable increase in the current program, but still affording only minimal levels of study in each area. Yet it is an honest approach insofar as each major area of the elementary school curriculum is addressed.

2. Philosophy of subject matter. This option might be a major in philosophy with an emphasis on the philosophy of each subject matter (e.g., philosophy of science) in which essential and fundamental aspects of the subject matter are covered. This approach might also provide a structure to the separate minors proposed in Item 1.

3. Text approach. This approach entails an unusual course of study that contains a close reading of seminal texts (the "great books") in each area coupled with an examination of school textbooks for the assumptions that they make about the discipline in question. The logic of this proposal, like the philosophy of the disciplines approach, is that the core structure of the discipline is addressed directly, and the "forest for the trees" problem that plagues most university study is minimized.

4. Genetic epistemology. This option entails the study of the developmental psychological literature from the perspective of the development of the concepts that make up the curriculum. In this approach the student learns the relevant developmental constraints upon the pupil's acquisition of the curriculum and lays out, as an unavoidable part of the discussion, the nature of the subject itself. The story of how the young child develops the notion of number, for example, is valuable in its own right, but also reveals salient portions of number theory, the arithmetical algorithms, and other aspects of mathematics. Similarly, the account of the child's moral development reveals the principal issues in moral philosophy and political theory.

5. Cognitive psychology. The student would major in cognitive psychology and make the workings of the mind the specialization. The subject matter content would be acquired through the consideration of how the mind operates mathematically, aesthetically, and so forth. Like the philosophy of the disciplines of text approaches, this would provide a structure for the reformed minors in each subject area. Each area would be begin from the perspective of how we think about and know the content in question. The approach fits well with the current trend in cognitive psychology that stresses the domain specificity of our thinking.

6. Pedagogical content knowledge. This option addresses the fact that teachers, even professors, inevitably transform what they know into a teachable subject. They give the subject a new structure and meaning, one that is appropriate to their students' level of understanding. These structures can be studied and codified. Since this reformulation of the discipline is inevitable, one might as well address it directly and, as in the other approaches, use it as a way to structure the reformed minors. In teaching *Huckleberry Finn*, for example, the teacher inevitably interprets the book as a story of race relations, or generation gaps, or a historical period, or latent homosexuality on the frontier, or whatever. How is this done?

Shouldn't the academic major address this question explicitly? As another example, many science teachers attempt to clarify the nature of electric current by comparing it to the behavior of water currents in various sized pipes. Is this a good way to think about electricity, and how would one know? The answer to the question is not to be found in physics nor in education, but in a qualitatively different kind of knowledge that will come from conversations between disciplinarians and pedagogues. This knowledge--the knowledge of what is a telling example, a good analogy, a provocative question, a compelling theme--is a proper object of study in an academic major and could yield the kind of understanding of the disciplines that is deep and generative. To have multiple ways of representing a subject matter, to have more than one example or metaphor, to have more than one mode of explanation, requires a high order and demanding form of subject matter understanding.

Our team will also take up the question of various instructional formats for the course of study. For example, we might want to devote a semester to each component of the elementary school curriculum and thereby promote a more coherent and integrated grasp of the subject matter than is otherwise possible when the same content is scattered throughout the 120 or so credit hours of the undergraduate program. Along these lines, the traditional methods course in each field could be part of these integrated semesters.

The heart of our work lies in the conversations between faculty members in the dfferent disciplines that have a stake in the elementary school. The problems that our project raises are as compelling and difficult as any that are raised in an academic discipline. That they entail the reform of the university curriculum for all students simply makes the conversation more lively and timely because pedagogical understanding is a worthy outcome for all university instruction.

A Model for Optimizing the Benefits of Collaboration

Raymond G. Taylor and Robert T. Williams
North Carolina State University

Richard Card
Deputy Commissioner of Education, State of Maine

Nearly fifty years ago, Chester Barnard postulated that each person has a "zone of indifference," that is, a set of issues in which he or she is utterly disinterested (1938). Barnard believed that when one tries to involve others in decisions which fall within their zone of indifference, a variety of non-productive and negative feelings, apathy, resistance, and resentment and are likely to flow.

Barnard's notion seems obvious; it contains lessons that we are slow to learn. For example, it is a common practice for one of our deans to staple a "circulation" slip to important arriving mail. It then moves among those listed on the slip. If it is of great interest to a particular recipient, it may be copied; if it is within one's zone of indifference, it may simply be passed on. We think Barnard would have approved.

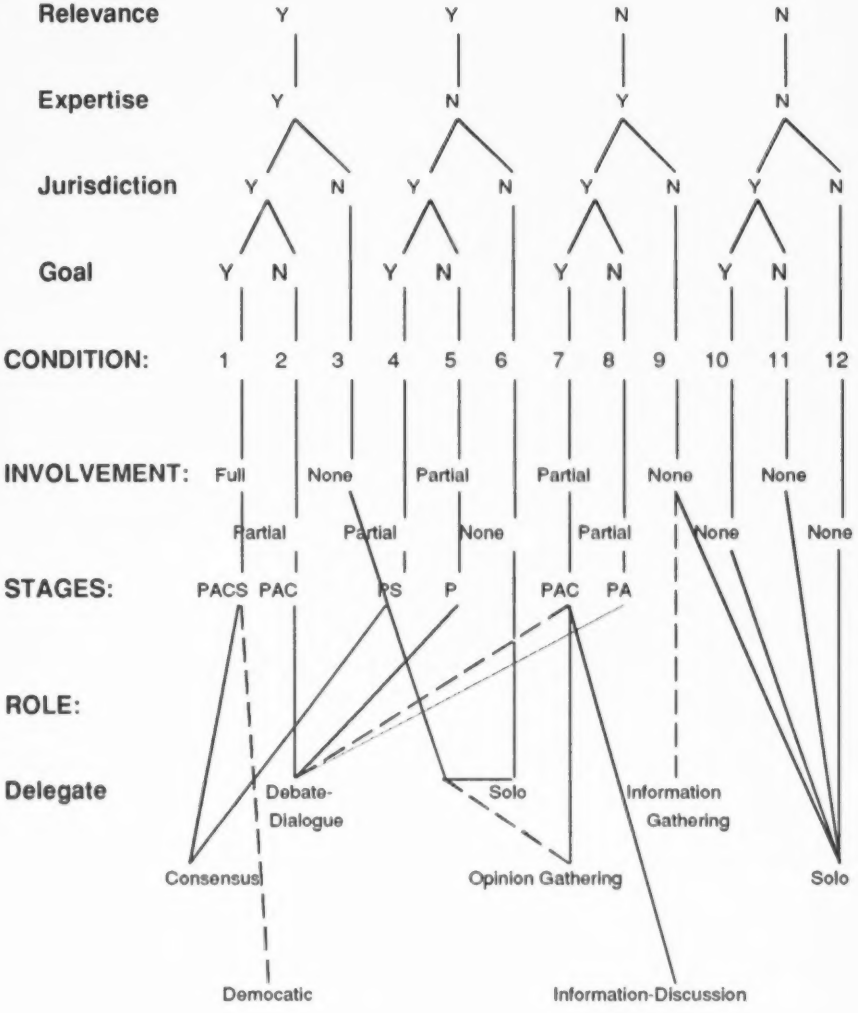
We also have long and regular meetings. These meetings are well-intentioned and are crafted by persons who want us to know what is going on; some important pieces of communication result; a certain degree of collegiality is obtained. Many of the items discussed are well within the zone of indifference of at least one, and sometimes all, of the participants. Predictably, boredom, annoyance, and impatience result.

Barnard's simple postulate illustrates just one of the many parts of a formal model (shown on following page) which we have developed and promulgated in recent years (1985). Space, and the essay format, will not permit or facilitate detailed comments on all parts. But we would like our readers here to become aware of the principles of collaboration as we see them. Those principles have a certain common-sense quality, yet they are extremely hard to practice consistently and even more difficult to keep in mind simultaneously.

The Four Tests

The successful use of this model depends on truthful answers to four questions. We often refer to these questions as tests; they determine how the situation under consideration will pass down through other portions of the model.

The Basic Model



Note: A solid line indicates the primary style recommended by the model.
A dashed line indicates a possible alternative.

Test One: Relevance. One of the beginning points for applying the test of relevance is to ascertain whether or not the decision under consideration is within the participant's zone of indifference. If it is, the test of relevance is failed.

Relevance must be viewed from the participant's perspective as well as from the manager's. It may be patently obvious to the department chairman that a certain decision should greatly concern the faculty, but if they do not agree, then the test of relevance is not passed. There are situations where faculty members may be interested in what is going on, but the matter is unrelated to their welfare or to their work. The chairman and the faculty must agree on relevance in order for the test to be passed.

Test Two: Expertise. The second test asks, "Does the person or group under consideration possess information or have a skill that can contribute to the decision?" The chairman then needs to ask another question, "Am I sure?" It is not unusual for deans and other managers in higher education to desire the full participation of others and to assume incorrectly that participants have all the prerequisite skills needed for competent collaboration. Very poor results may follow. In one case which we have studied, fictionalized, and published, the manager concluded that shared decision making was too cumbersome and ineffective to have a place in her organization, when all along the test of expertise had not been raised and would not have been passed if raised.

This test of expertise is deceptively straightforward; consequently, it is often answered, "Yes," too quickly. A very common example of this error occurs when faculty are first given an opportunity to share in a new and important process. It is hard for deans and chairmen who may work with a certain skill day in and day out to realize that others may totally lack that skill. It may not be a particularly difficult skill to acquire, but if a faculty member has never needed it or tried to exercise it, first attempts are likely to be halting. The aforementioned case study describes a situation in which the educational leader invited faculty members to interview prospective administrators. The leader in the case had interviewed administrators for so many years she assumed that anyone could do it. "After all, it's just a matter of asking questions and evaluating the answers," she told her peers. The participants failed miserably and quite a lot of hostility was generated between the parties involved. The manager should always ask, "Am I sure?"

Test Three: Jurisdiction. The third test is a bit more complex. It asks whether or not the participants have any real authority to decide, or to help decide, the issue at hand. Further, it asks if such authority has been defined in a way which the participants understand. Usually, the test of jurisdiction is not automatically or naturally passed. The participants do not, by the nature of their jobs or their positions in the organization, have jurisdiction; if they do, the manager should not

be deciding whether or not to invite their participation. In most cases pertinent to participative management, the manager is granting jurisdiction to others--that is, sharing a piece of power which he or she holds.

Exactly how much jurisdiction is being granted? Will the participants have absolute authority to make the decision; will they only advise; or, is their authority to lie in between? A manager must be certain that the answers to these questions are known. The test is failed if the participants have no jurisdiction or if that jurisdiction is not specified before the process starts.

Academic leaders who are new to organized, shared decision making often discover their first big mistake when dealing with the jurisdiction issue. They espouse a "democratic" process, which later turns out to mean something different to the chairman than it does to the faculty. This trap is particularly dangerous if the faculty make a decision which the dean or chairman does not like. Instead of building trust, the poor handling of jurisdiction--its eleventh hour reevaluation--destroys trust. "You told us we could make the decision, then you changed your mind." Or, "You asked our advice, then you ignored it." All participants are left with a bitterness that could have been avoided if the test of jurisdiction had been applied with care.

Test Four: Goal Congruence. The final test is even more elusive than the test of jurisdiction, and the improper handling of this test can be even more destructive. Test Four asks, "Are the goals of the participants with regard to the specific decision under consideration in agreement with my goals and those of the department?"

The chairman may not be aware of a critical lack of goal congruence until the collaborative process is well along and some members of the faculty speak openly of their frustration with other members. Worse yet, an important decision may be made by a group of persons whose goals are congruent with each other but are not congruent with those of the school. Such a decision may be unwittingly accepted by the dean or chairman, yielding a counterproductive result for the organization.

The test of goal congruence is easier to apply when the department is small and stable. Even under such conditions, however, it is dangerous to assume that every person is working toward the same general goal. Time must be taken to explore issues, set direction, and gain as much consensus as possible on important matters.

It would be incorrect to assume that all four tests must be passed in order for participative management to work. Each combination of answers to the above questions suggests its own approach. There are, in fact, sixteen combinations, twelve of which have meaning in the context of this essay.

The Twelve Conditions

In order to understand the second part of this paper, the reader must take into consideration the logical stages in making a decision. A commonly employed scheme is: defining the problem (P); listing the alternatives (A); anticipating the likely consequences of each alternative (C); and selecting one known alternative as a final choice (S).

Each of the twelve conditions calls for either total involvement by others, partial involvement, or no involvement. Total involvement means that others will participate in all four stages of the decision making process. Partial involvement varies among the conditions, but always means participation in one, two, or three of the stages (P, A, C, and/or S).

Examine the chart reproduced on page 69. Note the layout of the four tests and the twelve conditions. Below each condition is a recommended level of involvement in terms of P, A, C and S.

There are several reasons why partial involvement varies in degree and content among the conditions. In Condition Two, for example, participants are fully qualified by relevance and expertise to define the problem and to list the alternatives and consequences. These tasks are relatively unaffected by the lack of goal congruence between participants and the organization, unless that disparity is so great as to sabotage the entire process. Thus, for Condition Two, the model calls for an involvement which stops just short of making the final decision.

Condition Four, by contrast, notes that the participants have passed all the tests except expertise. They have the personal stake (relevance), the authority (jurisdiction), and the unified purpose (goal congruence) to serve well; but they lack certain necessary skills (expertise). Consequently, the model suggests that the alternatives and consequences be developed by others. Many boards of directors function this way. They determine the problem and they make the final decision, but they ask experts to develop a report listing alternatives as well as the advantages and disadvantages of each. Faculty are often involved indirectly in the decisions of boards of governors through the pooling of their collective wisdom, although some of the sense of collaboration is lost in the multitude of administrative levels through which such advice is passed.

Condition Five arises when the tests of relevance and jurisdiction are passed and the other two tests are failed. This is the prevailing case when a large diverse group, such as the voting body of a political subdivision, participates in a decision. Constituents rarely have expertise collectively and the congruence of their goals cannot be easily tested.

Condition Seven also calls for partial involvement. In this case, the test of relevance is failed. This is a particularly frustrating condition for the manager, because it often arises in a situation where others really ought to have full involvement but where they simply are not interested. Any person who replaces a highly autocratic dean is likely to discover that no matter how open he attempts to be, faculty members are reluctant to make suggestions or to give advice. When those faculty members are presented with an issue which should be of vital importance to them, they are likely to respond apathetically. If such relevance cannot be developed, and if the other tests are passed, the manager would be well advised to seek help in defining the problem, the choices, and their relative benefits. However, he should make the final selection by himself; and, presumably, no one will care anyway. After participative management techniques are used for awhile, trust and interest will develop to the point where the test of relevance will be passed. In the meantime, such a manager should experiment with other motivational techniques and reward involvement as fully as possible.

The final condition calling for partial involvement is number eight. Here only the tests of expertise and jurisdiction are passed. Because goal congruence is failed, the manager will not trust the participants to evaluate the alternatives; a disparity of goals helps to create debate which, although helpful in defining the problem, interferes with efforts to assess objectively the probable outcomes of each alternative. The model suggests using the participants to clarify the problem and list the various ways such a problem can be resolved. The consequences and the selection will have to be completed by the manager or by other participants to clarify the problem and list the various ways by which such a problem can be resolved. The consequences and the selection will have to be completed by the manager or by other participants who pass the tests of goal congruence and relevance.

According to the model, participants can fail the test of expertise under certain circumstances and still be "qualified" to participate in the final decision. However, expertise is necessary if the participant is to be involved in determining consequences.

The Eight Styles of Leadership

The third and final part of the model specifies the leadership behavior of the chairman as he works with the decision makers. These styles range from autocracy wherein no participation by others is allowed, to total abdication wherein the chairman gives others total authority. The eight styles represent gradations between these extremes.

Solo. Here the administrator operates alone, seeking neither information nor advice. He depends on his own experience and his own research, and will simply announce his decision.

Information gathering. In this mode the chairman uses others only for the purpose of researching the problem and alternatives. The participants are not invited to come together or even know who else is being asked for such information. Through private conferences and written reports, the administrator draws upon the contributions of others in order to make a decision alone.

Information gathering and discussion. This style is an important elaboration of the above. The chairman attempts to verify and develop information by bringing together those who can make a contribution to the information base.

Opinion gathering and discussion. Here the leader asks for an interpretation of the information by the participants. He draws on their expertise to explain the meaning of a body of data that is shared by the group.

Debate, dialogue, and equity protection. In this role, the administrator not only encourages the free exchange of opinion, but makes certain that the participants offering such opinions engage each other in refutation.

Democratic. This is the first style which allows for participation in the selection of alternatives. As a protector of the democratic process, the leader will give away most of the decision making power, will participate in the discussion, and will vote. But the final decision will be based on a majority basis.

Consensus. Under clear-cut Condition One circumstances, as well as under Condition Four, consensus seeking is probably the most effective role for the chairman. He encourages diverse opinion and dialogue and acts as a parliamentarian to secure the equal rights of all. He nurtures the dialogue until the entire group is able to admit that a certain decision or recommendation is the best the group is able to make, even though some individuals may prefer an alternative.

Delegate. Under limited circumstances, a decision within the organization may fall within the administrator's zone of indifference. The decision is not relevant to him or important to the organization.

Final Comments

We would like to caution you not to be put off by the model's mechanical appearance and nature. We believe you will find that good decisions can be made regarding collaboration simply by being aware of the issues raised by the model and without using its formulaic approach.

You may wish to give some thought and consideration to a "bottom-up" use of the model. In those situations, where you want or would expect a certain level of participation from others instead of applying the tests and working down, see which condition at the bottom describes the level of participation that you expect. Then work up through the model to find which of the tests must be passed and what you will have to do in order to provide your collaborators with the skills, information, and perspective they need.

Finally, certain aspects of the model presented above are not wholly original to us. At least one of the two questions we pose for the tests of relevance and expertise, as well as the notion of a chain of tests, was contributed by the work of Bridges (1967), Hoy and Miskel (1987), and Vroom and Yeaton (1973). The genesis of the test of jurisdiction may also be found in the same literature. We have organized, expanded, and developed these earlier contributions in a small volume entitled, *Power Sown; Power Reaped* (1985).

References

Barnard, C. I. (1938). *Functions of an executive.* Cambridge,MA: Harvard University Press.

Bridges, E. M. (1967). A model for shared decision making. *Educational Administration Quarterly, 3*(1), 41f.

Hoy, W. K., & Miskel, C. G. (1987). *Educational administration: Theory, research and practice.* New York: Random House.

Owens, R. G. (1987). *Organizational behavior in education.* Englewood Cliffs, NJ: Prentice-Hall.

Taylor, R., & Card, R. (1985). *Power sown; power reaped.* Augusta, ME: Felicity Press.

Vroom, V., & Yeaton, P. (1973). *Leadership and decision making.* Pittsburgh, PA: University of Pittsburgh Press.

Raymond Taylor and Richard Card hold copyright to the above material, portions of which have been published elsewhere. They have licensed the republication of this material to AACTE.

The University High School: An Early Intervention Collaboration "From Scratch"

John L. Brown
Supervisor of Program Development
Prince George's County Schools

James D. Greenberg
University of Maryland

As American public education moves to address the extraordinary needs of a pluralistic, multicultural nation, it faces the very critical priority of improving minority admission and retention at the college and university level. According to the American Council on Education, we are facing a "national crisis" in declining minority enrollment throughout the US today. Although minorities by the year 2000 are projected to comprise one-third of the US population, current higher education enrollment figures show only 17% of the college population to be minority.

Prince George's County Public Schools and the University of Maryland, College Park, are currently engaged in a unique and on-going collaborative effort to improve the minority experience at the postsecondary level. The changing demographics of Prince George's County and its creative efforts to support positive desegregation make this an ideal place to attempt significant experiments in this domain. Supported by the Maryland State Board for Higher Education, these institutions have been mutually engaged in the creation of a state-of-the-art college preparatory curriculum and instructional program designed to meet the needs of college-bound students of all ability levels and backgrounds.

The University High School, one of the Prince George's County Public Schools magnet programs located at Suitland High School in Forestville, Maryland, is designed as a model 9-12 college preparatory experience. At the heart of the program is a stated commitment to ensuring that all program participants are supported in developing those academic competencies identified by the College Board as necessary for success at the college or university level. This Early Intervention focus specifically targets first-generation college-bound students; through the interaction of faculties at both institutions, a special curriculum modeled on Mortimer Adler's *Paideia Proposal* has been created. Combining didactic, coaching, and seminar instruction, this program targets students' development of analytical reading, speaking/listening, writing, math problem solving, critical thinking, and advanced study skills.

The background for this innovative and ambitious effort is important. From the beginning, the University High School was conceived of as a collaborative endeavor. Officials at the highest level made that collaboration a public and central feature of the program even prior to the initial planning meetings. Building on this

strong base, the planning task force was launched with a visible representation from higher education and from a number of secondary schools in the county.

University representation was present throughout the initial planning stages, and this led to one of the novel strategies that provided both valuable data and a model for collaborative program development. The strategy involved a "research" and data collection effort designed as a basic needs assessment. A team of secondary teachers joined with the university representative to comprise an interviewing team. This team, which developed a semi-structured interview instrument, interviewed a cross-section of university faculty who worked primarily with freshmen and sophomores. The questions, and the ensuing discussions, focused on the underlying issue; i.e., if you could recommend to a secondary school particular emphases and activities to improve the potential success of the students you meet when they come to college, what would they be? Parallel interviews were held with University students who were graduates of Prince George's County high schools. The results were fascinating, and surprising.

Another particularly interesting aspect of the project was the involvement of University of Maryland faculty members in a series of Curriculum Dialogues prior to the design of the curriculum itself. Over 56 instructors participated in these seven sessions, conducted during the 1986-87 academic year. In two-hour sessions, participants were asked to discuss and evaluate models for Early Intervention programs. Instructors examined a variety of issues, including guidance and counseling strategies, critical thinking models, and issues centering on several disciplines. Again, the results provided critical input for the curriculum that was developed.

University of Maryland personnel have been actively involved in University High School staff development activities. From sessions on writing across the disciplines and critical thinking of suggestions for research and evaluation projects, personnel have interacted on a regular basis. Faculty have also visited the school regularly to do guest presentations on a variety of special topics in all major academic subjects.

This project reinforces the critical need for institutions to break down bureaucratic barriers to allow active communication to occur. Participants have been very pleased with the opportunities for cross-program communication and for university personnel to take a direct hand in the construction of an effective Early Intervention effort. Of particular significance is the broadening of the University participation to include many arts and sciences faculty alongside College of Education faculty.

References

Adler, M. J. (1983). *Paideia problems and possibilities.* New York: Macmillan.

Assessing and Changing a Troubled High School

W. Robert Houston
Prentice Baptiste
Jane McCarthy
Allen R. Warner
University of Houston

Teddy McDavid
Houston Independent School District

During the spring of 1988, a comprehensive study of Phyllis Wheatley Senior High School, Houston Independent School District (HISD), was conducted by a team of 23 university faculty. The study was designed to identify programmatic needs and to recommend potential ways to improve the education of high school students in the Wheatley community. The study was a part of a continuing collaborative program between the University of Houston (UH) and HISD to find ways to improve the learning of urban children and youth and the preparation of teachers for them.

The needs assessment study drew on the expertise of external evaluators but included persons in Wheatley (faculty, students, and community members) not only in identifying needs but also in formulating ideas for improvement. The task force was appointed jointly by Dr. Joan Raymond, General Superintendent of HISD, and Dr. William Georgiades, Dean of the University of Houston's College of Education. It is co-chaired by Drs. Teddy McDavid, H. Prentice Baptiste and Norman I. Kagan. They initiated this needs assessment, drew up the initial specifications, and invited the study director to design and direct the study. The perspective of both external professionals and school practitioners were vital to the development of a useful and comprehensive study.

The School

Phyllis Wheatley Senior High School has had an illustrious history. Named for a Black woman and poetess, Wheatley was the third Black high school built in Houston.

Phyllis Wheatley was born in Senegal in the mid-1750s, then brought to America as a slave. Within sixteen months, she not only had learned to speak but also to read and write English and soon was writing poetry. Recognizing her talents, John Wheatley of Boston freed her. By the time she was in her early twenties, she had published her first book of poetry.

Her life has provided a model for Wheatley students from its beginning. Indeed, graduates of Wheatley have made major contributions in politics, medicine, education, and business. A few of them include: Barbara Jordan, former member of Congress who achieved national recognition for her quiet but persuasive work in the Watergate hearings; Harold V. Dutton, Jr., Texas House of Representatives; the late Mickey Leland, Texas member of Congress in the US House of Representatives; E. Franco Lee, Harris County Commissioner, Precinct One; Wiley E. Henry, Trustee, Houston Independent School District; and Forest T. Henry, Jr., Principal, Phyllis Wheatley Senior High School.

In recent years, however, problems have plagued both Wheatley and the urban community that it serves. Composed primarily of African-Americans (67%) and Hispanics (32%), Wheatley's enrollment has declined, especially because it has one of HISD's highest drop-out rates. Test scores place the school near the bottom third in national percentiles and last in HISD's proficiency tests, with a failure rate of nearly 60%.

Despite these problems, structural changes are being made. Wheatley now has relatively small classes and the district's largest number of counselors and administrators. Students have started clubs, such as Students Against Drugs and Students Against Drunk Driving, showing support for addressing two significant school problems. In 1987, renovations were made to the school's interior and exterior, and security guards were added to maintain order.

Organization of the Needs Assessment

This needs assessment study was organized to examine learning from two major vantage points: first, from the perspective of content area specialists and second, from general studies that cross content fields.

Content areas included in the study are mathematics, English, social studies, science, foreign language and English as a Second Language, vocational education, fine arts, and physical education. A general appraisal of the total curriculum and test results was also made. Instruction was assessed by a team which observed three classes, each with 30 teachers, using a signed observation instrument designed to describe the extent to which practice models the research on effective teaching. Another study compared practice with research on cognition.

Support services were assessed in four studies. The first studied the operation and effectiveness of the library. Another evaluated the organization and administration of the school. A third study was conducted on the work of counselors, and the fourth was an analysis of faculty credentials.

School climate was explored in four studies. One analyzed student and teacher perception of the school, while a second examined school climate through interviews with students, teachers, and community leaders. The perceptions of seniors, graduates, and drop-outs were analyzed in the third study, while the last study explored affectives in the school.

Each of these 21 studies includes important findings and recommendations. The chapters in the study report are individualized to conform to the peculiarities of the area under investigation.

Procedures of the Needs Assessment

The needs assessment study was based on a school improvement project jointly developed by a HISD/UH task force. Through a series of conferences in late 1987 and early 1988, UH and HISD personnel explored the areas to be studied and shaped the study design. The principal investigators of each of original 21 studies included in the study were asked to participate in this needs assessment study. They then received general instructions and specific charges for their area, met individually with the study director, and refined their data collection procedures.

A formal orientation to Wheatley Senior High School and the community, attended by all members of the study team and led by Wheatley faculty and staff, was held in late January. Following this, the study team collected data at the school site during the month of February.

A preliminary report of the findings was completed by each principal investigator on March 4, with sections on findings, strengths, and recommendations. These were reported to Wheatley faculty on March 9 in a special faculty meeting. These preliminary findings were presented to small groups to communicate conclusions and recommendations, and to secure their reactions and ideas. The final reports of the 21 studies were due on March 21, 1988.

From these reports, a draft summary of findings was written by the study director and presented at a Synthesis Conference on March 28. The purpose of the conference was to test generalizations that permeated several studies, make tentative recommendations, and sharpen the final report of findings. Attending the conference, in addition to the study team, were Dr. Raymond and her Cabinet, Mr. Henry and Mr. Pesin from Wheatley, and several Houston community leaders. That afternoon, a conference was held with Wheatley community leaders in order to elicit their reactions and to secure their input. Finally, Wheatley faculty and study team membership met on May 7 for an all-day retreat. They discussed their findings, and began the process of formulating plans to improve the learning of Wheatley students.

Inservice for Teachers: A Case Study in Policy and Procedures for Successful Collaboration

James Binko
Towson State University

Gail Hobbs
University of California, Los Angeles

This paper describes how a successful collaborative model for inservice training of teachers has been created by the Geography Education Program. The cornerstone of the model's success is the co-equal participation of classroom teachers, academic professors, administrators, and teacher educators in efforts to define and implement the goals of the program at the local and state levels. The model has also successfully implemented the concept of teachers-teaching-teachers as the primary feature of inservice activities designed for experienced teachers.

The Collaborative Model

In 1986, the Geography Education Program was created by the National Geographic Society to promote improved geographic education in the United States. The program is an experiment in fundamental reform and reflects a collaborative approach to the problems of the schools--including teacher education--involving school systems, higher education, business, professional societies, and private foundations.

The Geography Education Program set out to create a nationwide network of state-level centers, called Alliances, aimed at: 1) improved understanding of the subject matter of geography; 2) promoting successful teaching strategies and materials for classroom instruction; and 3) conducting effective inservice activities for experienced teachers. In the first year, 1986, alliances were created in seven states and the District of Columbia; seven more were added in 1987; and in 1988 seven more were added to bring the current total to twenty-two.

Policies and Procedures Which Promote Success. Several policies and procedures have been demonstrated to be essential to the collaborative nature of the Geography Education Program and to the success of this approach to school reform and teacher education.

A Strong and Effective Coordinator. Collaboration can consume endless hours of the professionals involved unless their efforts are focused and carefully organized. Success depends on identifying one or more able professionals who

are highly motivated, possess strong organizational skills, and have a record of success in directing educational improvement activities

A Record of Success Between Participating Universities and Schools. Collaboration depends on successfully linking together the resources of all participating institutions: universities, schools, state departments of education, and private agencies. Therefore, success is more probable if you begin with universities, schools, and agencies which have some history of success in working together. Additional partners, those with no experience in collaboration, may be folded into the collaborative enterprise later.

The Inclusion of K-12 Teachers as Full and Equal Participants. The Geography Education Program is an ally of the National Writing Project in demonstrating this principle: Teachers must participate as full and equal partners in designing and implementing any system which has as its goal the improvement of classroom teaching. If the goal of a collaborative relationship is to reach teachers, then find able, highly motivated, and skilled teachers to carry the message. They need to be fully involved in planning and implementing the collaboration.

Regularly Scheduled and Well-Planned Meetings. If you want to sustain the momentum and enthusiasm of the collaborators, you must provide a systematic and regular series of meetings, well-planned and with clearly defined tasks. These tasks may include preparations for institutes and workshops, planning inservice events, curriculum conferences, and teaching demonstrations.

Effective Communication. Collaboration requires mechanisms for communicating with all participants and policy makers. Newsletters, a place on the agenda of local and state professional meetings, regularly-held meetings, letters, and phone networks are important pieces of a successful communications system.

Stewardship of Resources. Collaboration requires responsible management of human and physical resources, i.e., good stewardship. Those agencies and individuals who contribute material, time, and talent should expect that their contributions will be used efficiently, and that the collaborators will be accountable for their expenditures.

Summary

Collaboration is central to educational reform because it shares the power among all of the agencies concerned with the education of teachers. As a result, teacher preparation and inservice programs will alter previous structures, change the roles and functions of the agencies, and integrate and contextualize the curriculum. Teacher education is a developmental process that requires interpretation, analysis, and reflection. The outcome will be a new type of teacher who is in charge of his or her own professional growth, accustomed to working in a collegial mode, and confident about his or her ability to teach.

The quantity and quality of teachers for the nation's schools, particularly minority teachers, is a perennial problem facing educators at all levels. California State University Chancellor W. Ann Reynolds stated that to be successful we must look past today's headlines and conventional wisdom which report that today's teachers are poorly prepared and that Black and Hispanic students are doomed to second class status. The problems may appear unsolvable. However, when dissected there are workable solutions best provided by teachers themselves. Collaboration among educators at all levels is viewed as a "winning and viable" strategy for solving the problems of equity, access, and programmatic quality.

The papers in this chapter demonstrate that the viability of improving teacher education by using a collaborative approach is being tested. Varied strategies and approaches are being used to solve a myriad of educational problems. Principles to guide practice and promote institutionalization have been generated: e.g., cross-role teams, participant commitment and ownership, common agenda, shared decision making, and shared responsibility.

Collaborative projects exist at every educational stratum. The university is involved in areas that have traditionally belonged to the school districts or teachers, and the school district is involved in areas that have traditionally belonged to the university.

Projects related to improving the teacher education curriculum stress the importance of integration and contextualized knowledge. The emphasis is on reducing the isolation surrounding learning to teach.

Contextualized knowledge means that the knowledge is interacting at all times and what one draws from, what domain one might use in any given situation, depends on the particular goals and intentions the teachers are attempting to achieve at a particular time (Barnes, 1989).

Many programs do not currently possess a systematic way of delivering the teaching and learning over time so that the curriculum has some coherence and contributes to promoting the desirable processes of schooling. Attention needs to be directed toward greater articulation and coherence across programs and departments involved in teacher education. A power program needs focus.

Through task forces or planning committees, bureaucratic barriers are being removed and open communication established. Programs designed to improve equity of access for minority students to higher education institutions are built upon long standing relationships between universities and school districts. The results are action research projects and innovative implementation strategies; e.g., a special curriculum modeled on Mortimer Adler's *Paideia Proposal* or a comprehensive needs assessment study followed by a collaborative program improvement effort.

What is needed now is a coherent, holistic theory of collaboration with an articulated set of beliefs--based on research, best practice, and expert opinion--that can be transformed into teacher education or inservice education programs. It is believed that teacher education programs should be integrated and contextualized. Shouldn't there be a stronger interplay between the field experiences and academic course work? Shouldn't university supervisors and clinical teachers be in schools demonstrating lessons with children, interpreting teaching for novices, justifying their actions from all of the alternatives they might have chosen, encouraging reflection and study? A great deal has been done, but there is still a great deal to do.

Chapter Three
Role Relationships/Leadership

Helen Greene, editor*

Collaborative programs require leadership on the part of various actors in the participating agencies. Papers in this area were to address communication at all levels; the various structural arrangements which can be developed among universities, schools, teacher organizations, funding agencies, state departments, business, and government. New roles are required by collaborative ventures. Presentations were to examine successful individual and intra-organizational collaborative strategies; changes in role expectations and behavior; and the generalization of individual actions in successful collaborative efforts. Some of the questions that presenters were asked to focus on were as follows:

- *How does collaboration change the dynamics of role relationships and leadership?
- *What structural arrangements work best?
- *Where does the individual leader fit?
- *What modes of communication are most effective?

The papers presented gave various answers to those questions and presented research and practice on other aspects of role relationships and leadership. Research has found that the structural arrangements that work best are:

1. Leadership and commitment from the top
2. Relationships based on mutual respect and trust
3. Open, clear, and frequent communication
4. Mutual benefit to all partners
5. Common focus on mutual goals
6. Clearly defined responsibilities

Helen Greene is the Dean of the School of Education of the C. W. Post Campus, the South Hampton Campus, and three branch campuses of Long Island University. She has held a position as dean since 1973. A former president of the New York State Association of Colleges for Teacher Education, Dr. Greene was also on the AACTE National Board of Directors representing the Northeast region. Dr. Greene serves on many of the state-wide commissions and task forces established by the Commissioner of Education and the Board of Regents. In 1978, she was selected by the Office of Women in Higher Education and the American Council of Education as one of twenty women in Higher Education Administration to be so honored.

Sirotnik states that "Leadership at all levels of the educational enterprise must possess, endorse, and communicate a clear, coherent set of fundamental educational values to which all participants can be committed. This set must be small enough to maximize near consensus of endorsement and yet permit maximum flexibility for local initiate and creative response. Leaders, therefore, must be willing and able to empower others with the necessary resources (e.g., time) and autonomy for inquiry and school renewal" (Sirotnik, 1988).

It seems that leaders of school/university partnerships must be able to understand the values and the milieu of the school and the university, and appreciate their similarities and differences without placing any value judgment on either. However, it is obvious that there must be someone in charge of the partnership, or at least someone who will take ownership and guide the groups while inviting input from all participants.

Partnerships and the process of forming them are different from place to place and from the mix of personalities, community structure, and organizational pattern. They also go under a variety of titles such as, linkages, coalitions, alliances, consortiums, etc. Their goals may be to respond to many issues or just one problem, the partnership maybe formal or informal, and it may be conceived as a permanent organization or one that has a specific time limit in which to complete its agenda.

Goodlad identifies three basic characteristics that he believes are necessary for school/university partnerships: 1) The partnerships need to have a degree of dissimilarity, 2) The goal should be mutual satisfaction of self-interests, and 3) Each partner must be selfless enough to assure the satisfaction of these self-interests (Goodlad, 1985).

Goodlad suggests that school/university partnerships can meet these three tests if they begin with a recognition that the responsibilities of these two institutions for the quality of schooling are virtually inseparable. He states that the argument for school/university partnerships proceeds somewhat as follows:

> For schools to go better, they must have better teachers (and counselors, special educators, and administrators), universities must have access to schools using the best practices. To have the best practices, schools need access to new ideas and knowledge. Universities have a stake in school improvement just as schools have a stake in the education of teachers (Goodlad, 1985).

While not everyone agrees with the three basic tests as enumerated by Goodlad, he certainly delineates the roles for each of the partners and the need for the collaboration. The selections in this section include the edited remarks of

the major speaker, a summary of the symposium on the topic of leadership in collaborative programs, and selected papers related to the topic.

References

Sirotnik, K. A. (1988). The Meaning and conduct of inquiry in school-university partnerships. In K. A. Sirotnik and J. I. Goodlad. (Eds). *School-University partnerships in action: Concepts, cases, and concerns.* New York: Columbia University Teachers College.

Goodlad, J. I. (1985b). *Reconstructing schooling and the education of educators: The partnership concept.* Unpublished manuscript. University of Washington.

Remarks of the Major Speaker

School-College Collaboration is a Multicultural Environment

Donald Stewart
President, The College Board

This chapter presents portions of Dr. Stewart's remarks as they related to the theme of role relationships between schools and universities to help bring about more minority students going to college and to encourage them to enter the field of education.

Defining "common agendas" essentially defines the College Board. Brought into being 89 years ago by the leadership of a small group of schools and colleges in order to resolve the "chaos" over standards in college admissions, the Board's basic modus operandi is as a convener of involved parties and as a forum for reaching consensus. The College Board is actually one of the primary instrumentalities by which our remarkably diverse, national educational community analyzes its collective problems, achieves common agendas, and develops models for practical collaborative programs.

By no means do I want to minimize the tremendous challenges we face in crafting common agendas for schools and colleges in a multicultural environment. In one sense, our national future rides on our ability to meet the challenge. By the year 2000, about 80% of the new entrants into the labor force will be immigrants, minorities and women, who represent, as former Labor Secretary William Brock has noted, "people who have traditionally been disadvantaged. . . and in too many cases, uneducated or improperly educated."

I will not bore you with statistics that you already know, the enormous demographic changes that are taking place, which means that by the year 2000, 33% of those between 18-24 will be minorities. Two decades later this group will contain fully 40% minorities. Unlike 20 years ago, young, not older people, are the cohort most likely to live below the poverty line. In fact, over the last decade, families of all races whose head of household is 25 years old or less have experienced a drop in real income unseen in the United States since the Great Depression.

From one point of view, our current situation is similar to the past. Demographic change has been a hallmark of America. In every era of our history, new groups have risen to enjoy the American dream and have given back to the nation inestimably more than they needed or took. That demographics in the future are going to be different from the past is squarely a part of our tradition. But always, those groups have risen through education. However, lacking education, for new and historic groups, particularly in a world where technology rushes forward at astounding speed, we will succeed only in creating an underclass of the economically and socially dispossessed.

Therefore, for both economic and political reasons, education is crucial to our future, and not just mere access to indifferent and ineffective education--where some graduates can barely even read their own diplomas--but universal education of the highest quality from preschool to graduate school.

As President of the College Board, I note with pride and pleasure that today the doors of education are now open; but far too many students are either not entering or are entering unprepared. Many who do enter find that education opportunity received does not guarantee educational success. Too many of our minority youth are still being short-changed at all levels of education.

Fortunately, the importance of equality of education in the United States has now been recognized by many people--educators, business leaders, politicians, and social scientists. Pat Graham, the Dean of Harvard's School of Education, has noted: "Over the next decade... we must find ways to build public understanding and support for improved education for all. I suspect that one will continue in the public discussion of education... will be the perceived tension between excellence and equity."

Today, we must challenge ourselves. College access and quality really go hand in hand, or is it an either/or situation? It is my deep belief that, unless there is real academic quality, access is meaningless, an empty achievement. Not only must the door to quality higher education be open, but we must also do what is necessary to make certain that students from all backgrounds move through successfully and find top quality educational programs inside. And, in addition, we must encourage a significant number of minority students to become teachers and professors in order to inspire and encourage others.

I would like to suggest that you have already discovered an avenue of resolution, namely collaborative efforts between schools and colleges. On campuses from Berkeley to Ann Arbor to Cambridge, major initiatives involving university and secondary people are underway. With the Equality Project, as well as the Advanced Placement at the College Board, I believe we have some important models and solid experience in this regard.

However, it would appear that, ultimately, success in early grades and high school is the immediate key to initial enrollment and persistence in college, along with socioeconomic background. This fact, more than any other, speaks to the wisdom of your approach at this meeting. Students who earn As in high school are 25 times more likely to be on the fast track in college than students who earn Cs. Students who come from high-income families are four times more likely to persist than those from low-income families. The importance of persistence cannot be overstated for three reasons: first, for the well-being of the individual student; second, to ensure that a good and sufficient number of minorities enter the

professions; and third, and most important, to ensure that a similar number of minorities go on to earn college degrees and remain in academic life as teachers and professors. Nothing is more encouraging to students than to have teachers and professors to whom they can relate on a personal and intellectual basis.

By the end of this century there will be a significant increase in the number of retiring university and college faculty, representing a prime opportunity to increase the number of minorities in these ranks. With approximately 500,000 college faculty vacancies to be filled by the year 2020, we should be mobilizing the nation's energies and resources and directing all the minority students we can encourage towards this very bright employment picture. Unfortunately, unless they are coming through the pipeline, we have little chance of doing so. The key to the elementary and secondary school pipeline problem is the quality and quantity of teachers, particularly minority teachers. Your colleges must help us produce them. We know that 300,000 additional minority teachers are needed by the year 2000 to correspond even roughly to the projected proportion of minority primary and secondary school students we will have by that time.

The Board itself is a school/college collaboration. All of our trustees come from high schools and postsecondary institutions (an equal number from each), as do the trustee committees and the more than 60 advisory councils and committees, one for each major area of activity, each region, and each test and service.

Let me turn to more specific examples of successful collaboration on behalf of students. Many of you are acquainted with the our publication, *Academic Preparation For College*, which represents the work of hundreds of educators who collaborated in order to clearly articulate what college entrants need to know and be able to do. Over half a million of these volumes are in circulation, providing the basis for curricular enrichment in schools across the country.

As part of its work, the Equity and Opportunity Project has sponsored the EO Models Program: 18 different collaborative efforts between schools and colleges across the United States, each working in unique ways to increase the diversity of students who succeed in college.

Perhaps the most unlikely candidate among the College Board's programs for enlarging equity and opportunity is the Advanced Placement Program. Begun 25 years ago as a program for "elite" students to earn college-level credit while still in high school, the program has become successful for minority students.

I commend you for the growing efforts in schools, communities, and colleges to open the doors of real academic opportunity to those groups which have all too often not been well served educationally. Your efforts and success are being mirrored in their scores and participation in the college-oriented programs offered by the College Board.

Featured Symposium

Changing Roles and Responsibilities: University, School, and Union

Ann Lieberman and Mary Negben

Ann Lieberman's information is valuable in delineating the problems, successes, and the role of leadership in establishing a consortium. The symposium starts with remarks from Dr. Lieberman, founder of the Puget Sound Consortium and long-time advocate of collaborative ventures. The perspective of a school district administrator is offered by Mary Negben, Deputy Superintendent of Schools for Tacoma, Washington.

Seymour Sarason wrote:

> Those who are at home in the world of ideas and theory usually have never experienced the creating of a setting. They're interested in what is, has been, and should be. But they themselves have rarely, if ever, put themselves in a situation where the center of action has moved to the creation of what should be, where they will experience the problems as participants rather than as observers, and where theory and practice take on new relationships, the artist and the art critic, the person of action and the person of theory, the participant and the observer. People of action know that it's a fantastically complicated affair; people of ideas and theory know neither the game nor the score. People of ideas and theory know that most settings go seriously astray, that people of action are devoid of the "right ideas," and that the major task is how to wed practice to theory. There is some truth to both pictures, but neither group can understand this, perhaps because the people of action know they will have to think differently and the people of theory know they will have to act differently.

That's probably one of the best descriptions of the struggle to join school and university in some organic way. I give you the quote not to place blame, but to place the struggle of collaboration in that kind of context.

What I'd like to do is deal with four different questions. Those four questions turn out to be: What values should and do guide school/university collaboration? What practices help build collaboration? What roles and responsibilities emerge from this collaboration? And what problems do we have and what possibilities are there, given all these things?

First question. What values should and do guide school/university collaboration? I think one of the things that's happening in this conference is that a lot of people are talking as if collaboration is indeed the new "C" word. I worry only that we are using it as a kick, instead of really analyzing and struggling with what it means to collaborate and to put two or three, or maybe four, cultures together to

do something different. I do think that there are organic connections between schools and university. But up until now we have not collaborated. All of us know very well that we don't need any more research to tell us that the kinds of things that we are doing in our preservice programs have little or no connection to what goes on in schools. We also know that the university research has become incredibly distant from the school context in its problems. Every single day of my life since I've been in Puget Sound, I am confronted with how incredibly complicated are the problems of schools and (how) incredibly naive many of us in the university are about those problems and how to deal with them. Even as late as a couple of days ago when we were having a meeting on the creation of professional development schools, one of the teachers actually talked very passionately about how idealistic the rest of us were in the room, saying, "You don't really understand what we are actually participating in in teaching today." She just railed off all the problems that teachers are having today and the fact that burn-out is not a problem of teachers being worn out, it's a problem of teachers not knowing what to do in the face of a changing, complicated context.

It is true that since the Rand study we have a lot of knowledge about context, but we've studied it as if it was just a thing to study in and of itself, out of context, rather than working in the particular context on it. We have not had a sufficient mechanism to transform any of the kinds of research knowledge into teaching practices. We simply assume that if people do good research, somehow it will get to school people in some way or another. To my knowledge, the first thing I was involved in where people actually talked about transforming research into teaching practices was not done by researchers, it was done by the American Federation of Teachers (AFT). In New York, about eight years ago, there was a project where the union people came to several of us and said, "If there is such wonderful research going on, why don't you put it in ways that we can actually learn it and use it." They devised a whole system of taking the best research practices and creating teacher-like activities out of those pieces of research so that teachers could actually experience what researchers had found out. It allows for school people to participate in research themselves and bring the kinds of perspectives that only they can give.

But my worry is that the university will take these things as cosmetic rather than real. I looked at the AERA program and all of a sudden everybody has discovered the teacher as researcher. The Office of Educational Research and Improvement (OERI) will give bundles for the teacher as researcher, but it will be this year's kick, like collaboration, unless we take seriously the fact that that is a legitimate thing to do, should be institutionalized, could be institutionalized very easily, and could really yield a lot of interesting craft knowledge that we don't now have.

John Goodlad has said--and will continue to say--that both schools and universities need to join forces in simultaneously changing. I think John knows, as do the rest of us, that this is a very difficult thing to do. It is theoretically right that we need to change both sides. It's probably practically difficult to do that without a tremendous push from great deans who have courage and from enough faculty members who are willing and able to work with schools. I want to talk about how these things begin to grow and develop so that it can take place simultaneously. I think the vision is right; practices will show that collaboration should be the vision.

The current reform movement with the focus on teaching and teachers offers us some interesting opportunities. I myself have been involved in about four of the current things going on right now, so much so that I found that I really have changed the way I think about being an academic. Maybe that's good, because I think we do need to create a very different way of thinking about how to be in the university. We all don't have to do the same thing.

Second question. What practices help build collaboration? Let me now talk about some of the practices which I think make some of these perspectives real. I'm going to use the Puget Sound Consortium. The Puget Sound Consortium is my first big consortium, my third partnership.

I think the first thing I learned was that you literally had to defy traditional organizational forms. The second (thing) is that goals become clearer and grow along the way. There has to be some mutual need. We spend a lot of time convincing each other of the mutual need. I think the schools want to feel that they need the university. Certainly, the university has to come to understand that it needs the field. So, the mutual need is there in theory; in practice, I think it needs a bit of work.

Leadership has to be dispersed throughout the organization. Lots of people have to own and become committed to the organization and there have to be some big goals that people feel they're going to reach for. There ought to be leadership that has its foot in two camps: understanding schools and understanding the nature of the university since both things have to be legitimated.

Let me give some examples of how I both tried it and messed up, because I think that in the process of doing these things we have to live what we believe. In the Puget Sound Consortium, 14 superintendents make up the coordinating council, which is the leading policy-making group of the consortium. I work for them, but my office is in the university so I have both mixed loyalties and agendas.

When I got there they had been meeting for a year in task groups, and they had both school and university people. They handed me a series of reports and said, "Do something. We want you to activate this thing and make people connect somehow." The superintendents who interviewed me wanted to know that I

wouldn't sell them down the river to the university. There was a sense that somehow the university was distant from schools and that they really weren't friends, but they hoped that a real partnership would ensue.

I decided that I had to do something quickly. In three months' time, I did several things; several of them were flops which I learned from. I decided that I would have to create some activities to get people engaged. (At this point Dr. Lieberman spoke about sending teachers and staff developers to New York to work at Bank Street College on the "Voyage of the Mimi." The staff seemingly derived more from their first trip to New York than from their work on the curriculum project.)

That was the first mistake, among many. I began to realize that I was not Ann Lieberman who could do whatever she wanted, even though I had a small budget. I had to figure out a way to organize a group of people so we could begin to work a mutually respectful agenda. So, I got a group of people together, staff developers whom I thought I had a natural connection to, and they began to give me all kinds of advice. One of them told me that I was going to get nowhere in this consortium unless I talked to the district people and asked them first what they wanted to happen. I said, "What about the whole business of mutuality? How do we work with that, where we actually work together?" And they said, "Well, you'll learn, kid." Several of them also wanted to really participate, wanted to build an agenda, and I met with that group for about six months.

I very quickly learned that it was nice to have something on school time, which was my agenda, but I also had to deal with the district's real problems of getting substitutes, and real problems of, if they paid money to be in the consortium, did they now have to pay additional money so the teachers and principals could come to conferences? Again, the beginnings of coming to understand that the cultures are radically different. If we're serious, we have to deal with the barriers and pressures on the culture of the schools as well as the university culture. I was free to create anything I wanted. They were not free to participate in anything they wanted, because they had some very real constraints that I was very content not to even ask about.

After several other humbling experiences, I soon began to realize that there was something wrong with the structure of the consortium. One of the things that was lacking was that it started out as a leadership consortium with the idea that leadership was in fact superintendents and principals. I announced early in the game that teachers had to be involved because if there was no teacher involvement, there would be no teacher change. I was fortunate enough to get a small grant at the very beginning of my tenure in Washington. I was invited to a local meeting downtown, a meeting to empower teachers. I gave a little talk and then the head of the foundation said, "If you'll write four pages, I'll give you some

money." So I wrote four pages; again, another Lieberman dream to create a large cadre of teachers in the consortium, where they would do action research on teacher leadership.

At this time, I went to the coordinating council and announced, a little brashly, without much preparation, that I was about to get some money for teachers in the consortium and it was going to be for teacher leadership. The superintendents were not pleased. One superintendent said, "We finally have the union where we want them and now you're going to go talk about teacher leadership?" Another superintendent said, "It's a nice idea, but let's not call it teacher leadership, let's call it educational leadership, because then we can spread the wealth." I said, "No, we have to call it teacher leadership because teachers really feel like they're not participating in this partnership." They would have to struggle with what teacher participation means and somehow, after about an hour of discussion and very tense debate, they had a vote. They voted unanimously that we would have a teacher leadership strand in the consortium. We organized a summer workshop and found that the teachers were more resistant than the superintendents.

The teachers argued for the first two days, not with me, against me. They said, "What do you mean, teacher leadership." The first comment of the five days was from a male kindergarten teacher who got up and said, "I don't understand why we're even here. What is this teacher leadership? I'm here from the union and there are only two issues to be discussed: class size and higher salaries." And he sat down. There was tremendous tension in the air. Other teachers got up and said, "I don't know whether I could even respect another teacher who called herself a leader." They began to argue about incredible issues, including tremendous distrust of me. Somebody said, "Look, we know you work with the other union, this is a different union." I said, "What about talking about the issues? Forget the unions, let's just talk about the issues." There was, in fact, a strong union contingent of people there who were angry the whole time through.

I'm telling all of this because I think it has a lot to do with the process of change in working with people when you really collaborate. By the end of Tuesday we had teachers in groups and one teacher raised her hand and said she wanted to change groups because the people in her group didn't think like her. She was roundly attacked by everybody else in the room, 84 other people. They said to her, "Do you hear yourself? Are you a teacher? Can you say that about your peers? You don't like it because they think differently than you." We kept raising and letting the conflict out and fought in public. I hate conflict, but I didn't let one person in there go out into the hall or into the restroom and deal with conflict, I made them bring it back and talk about it.

On Wednesday, we had somebody from Dade County come and talk about teacher leadership and teacher participation in this current movement. She said exactly what the Monday speaker said, exactly what the Tuesday speaker said, and in fact reiterated exactly what I had said earlier. Somehow it was different coming from one of their own people. The same issues got raised, the same kindergarten teacher stood up and said, "There's only a question of class size and higher pay," and she said, "Those are very important issues. But, you know, in Dade we're trying to do something, we're trying to sort of laterally create a variety of opportunities for teachers so they continue to learn, grow, and change, like all the other people in all the other professions." The hostility kept coming and finally she said, "What choice do we have? We have a choice of participating in this movement or not participating and letting everybody else tell us what to do." That one little line and her continuing to discuss with her own peers shifted what went on in that room. By Friday people were walking around with badges on saying, "I am a teacher leader."

They had totally changed my four pages and decided to create a way of researching where their own peers could experience some of the kinds of experiences they had had in a week. Today, they are doing the research that I think a lot of university researchers wish they could do. About a fourth of them have become very excited about research; some of them have become very excited about the notion of shared leadership and what is teacher leadership and do you have to build colleagueship before teachers will really accept one another in different roles. We are really struggling with some of these very, very tough issues.

The beginning activities of the consortium did in fact begin to build some commitment, symbolized collaboration, and some new norms of cooperation, especially when I learned to say that I had messed up. There's nothing like taking responsibility for doing dumb things for people to begin to trust the fact that you're really open to change.

As much as I like to see everybody collaborating like crazy, I think we really do have some problems that are tough ones we need to begin to share with one another. Not only do we have different cultures, reward systems, and concepts of time, but those things do get in the way of work. We have to figure out how to do that. I mention time on some of the examples I've given, but it is an increasing problem with us. If you work with teachers, when do you work with them? The teachers will tell us over and over again that they can't come to a meeting at 5 o'clock and do their best thinking. We have to understand that the labor-intensive quality of teaching does not give somebody the feeling of being real sharp after a whole day with students. So, we have tried to build in time on school time.

As soon as you build time on school time, what you're also doing is cutting into school people's sense that they're not doing their real job. The conflict is how do you pass that hump of having the collaborators work long enough so that they can also struggle with some flexible time and feel that the time with adults is worth it. The real time is with students; other time is with grown-ups doing other kinds of things. We're essentially trying to build a new system on top of an old system, and so the old system is hanging on. It's too facile to say, "Well, if you team taught, you'd have more time."

Third question. What roles and responsibilities emerge from this collaboration? There is no question that the leadership of the collaboration is critical. We're just beginning to even understand what that means. If we put at the head of school/university collaborations part-time, adjunct people who themselves have tenuous tenure at the university, I think it says a lot about how serious we are about these collaborations. I've seen many, many projects where somebody is hired from the outside, part-time, to run some collaboration so you can go to AERA or AACTE and talk about these terrific collaborations that we have.

Fourth question. What problems do we have and what possibilities are there? We do need real leadership in these partnerships. How do we create people who really have one foot in each culture, where the vision can be larger than the school or university so that they will be willing to take risks to create things that neither side actually has thought about before? In my situation I think the financial support is incredibly powerful. I have $250,000 a year to spend to create these school/university relationships. But how much money, who gives it, and who controls it is forever a problem. I am now getting calls from people who say, "We had a two-year Ford grant, what do we do when Ford takes the money away?" That is something we need to struggle with. If we don't institutionalize these kinds of collaborations and make them part of the fabric, not an extra, then this will be like any other project that we've all lived through. If we're serious, we have to begin to think about who is going to pay for these collaborations that do take time to work before we're ready to institutionalize them.

The last thing I want to talk about is the incredibly interesting problem of communication between and among partnership members. In our particular partnership, it is not only trying to talk about and create the agenda over time with the school people, but it's also how you talk about that to the university people as well. I still find that if we have a meeting with somebody who comes from Stanford, the university people come out. If we have a meeting about something that the school people want to talk about, no university professor shows up. So we haven't quite connected with an agenda that might be mutually connected in some way; even though people are interested, they're not interested enough.

The communication that I participate in is very different than the communication in the district itself. Mary is going to talk from her perspective. Before I talk about the changing roles and responsibilities, she's going to talk about her changing role as a deputy superintendent, and about communication and socializing the new person from the school's perspective.

Mary Negben

I want to address three issues having to do with the consortium. One is the issue of socializing new members from districts into what the consortium is doing. Second is the necessity for an internal structure within a district to handle all of these consortium activities. And, third is the impact the consortium has had, particularly on my role as a deputy superintendent. Tacoma is a district at the south end of the Puget Sound. It has 32,000 students, preschool through 12, and it also has a Bates Vocational Technical Institute. It's an urban district surrounded by suburban districts. The consortium itself is composed of two districts that one would envision as urban (Seattle and Tacoma), some that are kind of half urban and suburban; and the rest are suburban school districts.

I came to Tacoma and was so glad that we were involved in consortium activities. I had a vision of school/university partnership that was based on my former position as a deputy superintendent in Albuquerque, New Mexico. Here's what my vision was. First of all, we were the only school district in the area. We were like a sole source vendor for the University of New Mexico (UNM) and they were for us, too. Second, there was longstanding partnership--many years, excellent relationships, all kinds of programs going between Albuquerque and UNM. Third, there was already set up an internal structure within the Albuquerque Public Schools to handle that university partnership and the structure was the deputy superintendent. All activities that happened in that partnership went through the deputy superintendent's office. If somebody wanted funding, if somebody wanted approval or just to give information, that was the office they went to. I felt as a deputy I had a good handle on what was happening. There was support for that relationship among the board (and) the staff, and geographically they were located very close, less than a mile between the central office and the University of New Mexico.

That was my vision. I came into this consortium where there are 14 districts. If you can imagine, there is some competition between and among us for resources, for participation in activities. Not only that, but I didn't know any of those other 13 people from the other districts. Geographically, we are spread out and that really does create some problems. For me to attend meetings is an hour commute, one way, and for other people it's even longer.

There is not within the Tacoma Public Schools much support for the consortium. It's not really any lack of support, it's more a lack of information about what the consortium is doing. If you ask the majority of teachers at this point in time in my district, "What do you think about consortium activities?", they would say, "What, are we a member of that and what is it that they're doing?"

Finally, there was no internal structure. Since there was no coordinating function within the district for that, it caused some problems for us.

How do you socialize somebody to that situation? Four things were done that were extremely helpful to me. One was to give me, a new district person, background information. Somebody could have given me a stack of stuff six inches tall with all the minutes from past meetings and I probably would not have read or absorbed it. What Ann and the consortium did was provide pertinent information: a little bit about the background and history, a little bit about the mission, and a lot about what we were doing right now. That was extremely helpful.

The second thing was opportunities to socialize. The third extremely helpful thing was consistent articulation of the mission. Ann did it again today: two things are extremely important in that mission, and one is teacher empowerment. That was a real difference for me as a deputy superintendent in how I envisioned a partnership working. The second thing which Ann also mentioned today is the need to have a tolerance for ambiguity. She mentioned clear linear thinking--where is the structure and what are we doing and where are the goals and where's the timeline? In the consortium there are a lot activities that take a while to develop that structure so we all need to have that tolerance for ambiguity.

The last element in terms of my own socialization was simply time. I could not anticipate, I could not expect it from myself, nor could Ann or anyone else have expected it from me, that I would become familiar with all of the activities that were happening in that consortium without the benefit of some time.

I want to look now at the need for an internal structure. The first step was to identify who in our district were the major players in consortium activities. Now somebody ought to have that, somewhere there ought to be a list. Since so many of these activities have grown and membership had changed, people had changed. . . that probably took the longest, figuring out who were the people who were participating on consortium activities. We found 40 within our district . . . that participate fairly regularly on committees.

Once we had them identified, we sat down, interviewed them personally, and said, "What is your group? Who else is in your group? What are the purposes? What were your major activities last year? What do you want to accomplish this year? What is the cost to the district, because that's something my board is very interested in, and what is the value to the district?" The last question we asked

was probably the most significant in terms of pointing out the area that Ann talked about earlier, and that's communication. We said, "What's your method of communication with other people who are participating in the consortium and with other people in the district in general." In almost every case the response was, "None," or "Informal." "Oh, we started this project, so I called so-and-so because I thought they might be interested." Structure for communication was not there.

There were some real benefits to interviewing people. One benefit that I hadn't even anticipated was recognition. No one in our district had said, "Oh, you're a member of the consortium, let me talk to you about it." In the past people really appreciated that. The second was reflection. Everyone to whom I spoke needed to do a little reflection on where they were in the consortium and what benefit it was. And the last was defining some responsibilities. We found situations where there were three or four participating; they didn't even know all the other people were participating; somebody needed to be a contact person.

In terms of setting up a communication system, that's presently what we're in the process of doing. We're starting with just communication between and among those 40 people and we're doing it on a written summary basis that will go out once a month. That's going to be helpful, it's going to help us see where we need to link up with each other. But we need to do a lot more than that, and that's a process we'll be starting during this semester. What we need to do is communicate to everyone in the district what's happening in the consortium and to expand the opportunities for participation. We have several opportunities to do that. The Puget Sound Consortium itself sends out a newsletter.

We do have a weekly staff bulletin and that is widely read by all of our staff. What we will do is put a little thing in there on the Puget Sound Educational Consortium every week. We're going to start with, "Yes, we are members, and here's how we started and here's some things that we're doing."

Last, in terms of internal communication, probably the most important and most effective is talking to people face to face. I visit a school every morning and come about half an hour early. That half an hour is time for the staff to meet with me informally, discuss whatever problems or concerns they might have. These range from difficulties with implementing the elementary reading series to, "Why doesn't our drinking fountain outside work?" But it also gives me an opportunity to update them on major activities within our district, and an excellent opportunity to talk about what's happening in the consortium and how they can participate.

Now one of our topics today was changing roles and responsibilities. I would say that my own participation in the consortium has certainly had an impact on my role and responsibility. One of the major impacts is simply time. Finding the time to coordinate, communicate, and even to attend meetings can sometimes be quite

difficult. However, in return for that, I feel that there are extreme benefits in terms of professional growth. We have begun just this year eight new projects in the consortium. Every one of these has impacted me in some way by extending some knowledge and skill. I have been able to be either a leader, facilitator, participant, champion, or a cheerleader. Just having the opportunity to take on those different roles has been a professional growth experience for me.

I'd like to conclude with some points that I think are essential if a district is going to realize the full benefits of that participation. Two things that I think are very important are recognition for participation and recognition for achievement. The people on my staff who participate, the teachers in the schools who participate: somebody needs to know that they do that. Somebody, when they visit the school, needs to say, "Oh, you're part of the teacher leadership group. How is that going? I read this wonderful thing that you did." Somebody needs to say, when someone has achieved a major goal, "You did a good job with that," whether it's a letter from the superintendent or an opportunity to report to the board, that's important.

The next thing I think is you need to give time. If my teachers need to go to a meeting and it happens to be all day, I need to be able to pay for the substitute for them. Sometimes it's not payment so much as getting a substitute. But I also need to provide the same time for the people who work directly for me. If my staff need to be away for a consortium meeting, I need to let them know that that's okay.

Lastly, I think it's important to empower and entrust. Probably that's the major lesson that I've learned. Some of the projects that the consortium has undertaken, I've been a little dubious about. It was very important to me to let it go, to let them have the power to do it. It's also extremely important for me that if things don't go exactly right and if we do have failures, not to look for somebody to blame, but to say, "Let's go on from here." People in my district will not be willing to take risks unless I give that attitude that we will learn, go on and, things will be better. So, empowering and entrusting is very important.

These are some of the ways in which participation in the consortium has changed my role and responsibility. Ann will talk a little bit about other changes.

Ann Lieberman:

Let me just talk with you a couple of minutes about some of the other changing roles and responsibilities that I think we have seen as a result of our three years of work together.

For the professors: two examples. I called up (a new professor) when I heard she got hired and basically said, "Look, you don't want to be just a regular professor do you?" I got her in a project before she came. I knew she was a great researcher, but I also thought it was important that she work in a real school context. It's too

early to tell, but I have a sense that she will never be the same kind of researcher again because she's working with real school people with incredible problems and it can't help but influence the way she thinks. I know she is influencing the way they think.

Another professor organized a proposal for a professional development school, and in the process found that she was incredibly good at administration. She had never really talked face-to-face with a union. She negotiated a meeting between four union presidents and was amazed at her own talent in really clarifying the issues that undoubtedly will come up between the union and the university in trying to create new roles for teachers. It was an historic meeting where there was real give and take instead of anger and adversarial relationships.

For students. We've had some incredibly interesting changes in what the students have become. One student, who came as a doctoral student, has been leading the teacher leadership project and learned not only about teachers, school, the culture of change, and herself, but she finally came to understand through her work with the teacher leaders how meaningless it is to give staff development to people when you just tell them what to do. Totally changed her whole view of the world--she wants to be a different kind of professor who wants to teach in a real school and do research in a real university. We are finding ways to socialize these people in a new key; we've got to change the university quickly enough to make use of these people.

The school people. You've seen Mary, who I think is in the process of changing. We have an assistant superintendent who is teaching both the university and school people about portraiture. We have teachers in the teacher leadership strand who are doing research and going to get the professors to work with them rather than the other way around. We have the president of the Seattle Teachers Association who is in the collaboration, helping create schools for the 21st century by negotiating with her own union as well as helping us somehow get better relationships with the union, writing papers about the union's culpability in the current movement.

On my bad days I think that we perhaps will become irrelevant if we don't change. On my good days I think that building a collaborative culture in the schools and university will provide models for both sides. Suffering from isolation, both of us would do good, marvelous work together if we have and create authentic collaboration.

Selected Papers

This chapter is represented with four presentations from a total of seventeen which included research, practices, and policy on either role relationships or leadership or both that are necessary for effective collaboration to take place.

The Joint Committee on University Affairs: A Study in Success

Philip Rusche
Helen Cooks
The University of Toledo

Lola Glover
Director of the Coalition for Quality Education, Toledo, Ohio

Christopher Ellis
Deputy Superintendent of Schools, Toledo Public Schools

In 1985, the Student Development Division of the University of Toledo invited eight civic organizations to help sponsor a workshop designed to give information about higher education to minority junior and senior high school students aspiring to go to college. This collaborative effort led to the formation of the "Joint Committee" to continue the dialogue relative to helping minority youth achieve in the public schools as well as prepare them for entrance into some type of postsecondary study. Later that year, the Joint Committee on Minority Affairs was formally organized by the university as a 35-member body whose focus was to identify, examine, and make recommendations concerning critical issues that directly relate to an impact on the educational aspirations and goals of minority youth.

The Joint Committee on Minority Affairs consists of representatives from the University of Toledo, the Toledo Public Schools, Toledo Catholic Schools, and leaders of the Toledo minority community. Originally the committee was co-chaired by two vice presidents of the University. However, their role quickly became advisory in nature and a new organizational structure evolved, with the chair held by a professor in the College of Education and Allied Professions, and two vice chairs, one representing the university and the other the community at large. The committee is organized in the task groups. These include: a steering committee; a curriculum planning and development committee; a recruiting, admission, and retention committee; and a mission and challenge committee. Ad hoc committees have been formed as needed.

The structure and composition of the committee were developed as a result of studies conducted by university staff, as well as from information derived from studies done nationally. Projects undertaken have all resulted from research about local schools, the Toledo community, and its students. These studies have been augmented through information gathered about other similar successful ventures tried elsewhere.

Successful Joint Committee projects include an annual conference for aspiring minority youth and their parents and an annual Eighth Grade Recognition Day. In addition, a mentorship program has been established on the campus, as well as an "adopt a school program," an enrichment program for junior high schools, and a minority scholarship program. Recently, the Joint Committee has proposed a school-student contract agreement program for aspiring minority students, a high school college club, and a mentorship program for high school and junior high school students. Several other projects are at various stages of discussion.

Research emanating from activities of the Joint Committee include: project impact on minority students; the role of parents in the educational process; teacher attitudes regarding minority youth; community influences on learning; university obligations and responsibilities; and other related matters.

An idea that started as the dream of a single individual has evolved into a sgnificant educational resource in the city of Toledo. Success has resulted because of parental involvement, equality among constituent groups on the Joint Committee, a commitment to problem solving, private school as well as public school involvement, early identification of aspiring students, and acceptance of the fact that minority youth do want to achieve. Much that has been written about minority youth and their families can be supported through experiences of the Joint Committee. However, the unique outcomes of this Committee's activities indicate that much more research and study is needed regarding the variables affecting education of minority youth.

Partnerships in Teaching Critical Thinking

Mary Diez
Alverno College

This presentation focused on a collaborative project, "Partnerships in Teaching Critical Thinking," involving a college of education and 22 elementary, middle, and secondary schools in an urban area over a three-year period (1985-88), funded by a federal grant. The focus of the project was the development of school-based designs to integrate critical thinking across the curriculum.

The program had four distinctive features. First, the inservice instruction focussed on the development of teacher generated definitions of the abilities related to critical thinking cutting across the subject areas. Second, the inservice instruction was designed to provide the teachers with ongoing support and feedback. Third, the participants represented interdisciplinary teams from a school. Fourth, all work involved collaboration between college and elementary/middle/secondary school educators.

While the purpose of the project was the improvement of the teaching of critical thinking in elementary, middle, and secondary school students, the project directors sought to work toward the establishment of curriculum coherence through institutional collaboration for the development of critical thinking. This program was designed to assist teachers to be responsible agents of curriculum change; therefore, the design of the inservice focussed on the development of new roles for teachers within the school setting, and new roles for the college faculty as coaches and facilitators.

Because of the focus on the role relationships and leadership involved in this collaborative effort, the presentation outlined the processes and procedures used in the design of the inservice, including the involvement of teachers from area schools on the planning committee and project team. For example, it described 1) the screening procedure used to select schools where faculty were ready to take on this role in curriculum change, and 2) the agreements made with administrators to ensure that the teachers would be supported in the implementation process.

The project results were examined as well, looking at the effect of the collaborative project on the teacher participants, on other teachers in the participating schools, on the students in those schools, on the college of education--its faculty and preservice students. These are briefly described as follows:

1. Effect on participants. Teachers involved in the project reported changes in their ongoing role in the development of curriculum and insights about their power to effect change and influence practice. They also described changes in their own teaching practice.

2. Effect on other teachers. In most of the schools participating in the project, the involvement of other teachers grew with the implementation of the team's plan. There were some variations within type of school, with elementary schools tending to involve all their teachers. Middle and high schools, generally larger and more complex organizationally, tended to build involvement more slowly--by unit or department. A nearly universal experience, however, was the positive reception that teacher teams received in their own inservice presentations to their peers, leading at least one principal to revamp the process of inservice in his school to maintain teacher involvement in the development of each inservice program.

3. Some data was shared on the impact the project had on students in the 22 schools. Preliminary test data showed positive impact on reading and math scores in the schools implementing their program designs; qualitative data also indicated positive impact on students' involvement in learning activities.

4. The effects on the college of education are varied. The faculty have given joint presentations with teachers from the project schools, establishing professional colleagueships. There is an increased respect between college faculty and practicing teachers.

Many of the schools have requested student teacher placements. The plans of the 22 schools are made available to preservice teachers as models of locally developed curriculum designs. One faculty member has created a simulation for preservice students that involves them in the kind of curriculum design work the project teachers engaged in. Thus, the college hopes to begin to shape--from the very beginning of teacher training--the sense of the role of the teacher as a responsible agent in curriculum development.

Some generalizations were drawn about the aspects of the "Partnerships in Teaching Critical Thinking" project, related to the potential for college/school collaboration in building new role relationships for teachers in elementary, middle, and secondary schools.

Teacher/Professor/Administrator Empowerment: A Driving Force for Professional Development School Collaboratives

Roger Pankratz
Carl Martray
Western Kentucky University

Sarah Laws
Bowling Green Public Schools

A collaborative enterprise has been established between Western Kentucky University and three public school districts for the purpose of improving professional development experiences for both preservice and inservice teachers and administrators. Programs and projects are being explored within this university/school collaborative toward the development of "Professional Development Schools." The concept of professional development schools has as its key attributes: 1) a productive learning environment for children, 2) a challenging environment that provides professional growth experiences for preservice and inservice teachers and administrators, and 3) an opportunity for ongoing research and development in teaching and learning. The beginning focus of this collaborative effort is on a new teacher mentoring program designed to markedly upgrade the student teaching experience.

Western Kentucky University has enjoyed a long history of collaborative involvement with public schools. Its Professional Development Center Network and its Kentucky Schools Technology Project have both won American Association of State Colleges and Universities Excellence Awards. Previous developmental efforts funded by federal, state, and local programs have produced useful models for the organization of collaboratives. These funded efforts have also produced highly effective processes for the cooperative development of innovative programs and practices in education. Collaborative organizational structures and involvement processes have proven to be very useful and productive in Western's past experiences working with local schools. Over the past two years, a third and more personal dimension, teacher/administrator empowerment and efficacy, has emerged from research and experience and has provided a new thrust for cooperative educational improvement efforts.

This collaboration enterprise is utilizing what has been learned about collaborative organizational structures, collaborative involvement processes, and teacher empowerment/efficacy in its movement toward the creation of Professional Development Schools. It is the purpose of this paper to describe these three dimensions of collaboration and how professional empowerment and efficacy are

being employed as a driving force to build collaborative structures and promote collaborative processes.

An Organizational Model for Collaboration

The developmental efforts of Teacher Corps during the 1970s taught us a great deal about collaboration with public schools. Portal schools were the early models of Professional Development Schools or the designated teacher training schools. For portal schools to function, collaborative structures between teacher training institutions and public schools were established consisting of teacher educators, school administrators, teachers, and parents to monitor and provide guidance to this cooperative enterprise. However, Pankratz and Williams (1974) found the structure of a 20-member steering committee comprising representatives of various role groups very inadequate for shared decision making in the operation of portal schools. After experiencing a year of reduced collaborative activity, a moratorium was called and a six-month study of collaborative organizations was launched. This resulted in a model for collaborative structures and processes that proved helpful in the portal school effort of the 1970s and has guided collaborative efforts at Western Kentucky University in the 1980s. The assumptions upon which this model for collaboration was based were:

1. There are at least three distinct groups in a collaborative effort each with a unique role and function.

   a. There are the "controllers of resources" or the administrators who, because of their authority, have the power to make decisions which can give life to a consortium or which can crush its existence.

   b. There are the "role groups," (teachers, parents, students, etc.) who are affected by the decisions of the first group, but whose voices are vital to a truly shared decision-making effort.

   c. There are the "task groups" whose responsibility it is to plan and implement programs agreed to by collaborative decision-making bodies.

2. For collaboration to be functional, the controllers of resources must be willing to share their power by responding to input from role groups.

3. Collaboration is more functional when the controllers of resources from the various institutions in a consortium form a shared decision-making body comprised of representatives of significant role groups in the consortium. For collaboration, these two decision-making bodies must agree.

4. For collaboration to be functional, the purpose and limits of the consortium must be clearly defined and agreed to by all parties involved.

5. The commitment to shared decision making by member institutions in a consortium is directly related to the investment of its own resources in the shared effort.
6. For collaboration to be functional, a process for input and shared decision making must be clearly defined and understood by all role groups.

The above model implies that collaboration must occur at two levels for a cooperative enterprise to be successful: among the controllers of resources and among the representatives of "role groups." The model also implies that in successful collaboratives there is a sharing of resources, power, and decision making, and that communication structures are well established and there exists a two-way information flow between the controllers of resources and the role group representatives. The collaborative enterprise must have a defined common goal and each of the constituent members (i.e., agency, school, institution of higher education) must contribute its fair share of resources if there is to be a commitment to the cooperative effort.

Collaborative Processes for Developing Innovative Programs and Practices

Collaborative arrangements between a university and public schools are usually formed to achieve a common goal or purpose. This often involves the development and implementation of new and innovative practices that will produce the desired educational improvements in schools and/or institutions of higher education. Hall (1979) described a framework for analyzing the adoption of innovations from programmatic point of view. Seven "levels of use" are defined that characterize the behavior of the users of the new program or practice. Pankratz, Tanner, Leeke, and Moore (1980), in studying Teacher Corps projects across the country, have described planned change as also including a political process that involves commitment and support of key individuals in the organization. A team of university and school personnel at Western Kentucky University, who have been involved with a variety of educational improvement efforts over the past 12 years, has concluded that successful planned change requires careful orchestration of both programmatic and political processes. The important ingredients for change and the adoption of innovative programs and practices are: 1) support by the administration, 2) commitment by key administrators and faculty, and 3) a program of staff development. A typical scenario for orchestrating the development of a new program or practice would include the following critical processes and/or events:
1. Ensure that a general awareness of need is perceived by key formal and informal leaders.

2. Obtain agreement by formal leaders and informal leaders on a process for program development: secure administrative arrangements for the program development efforts.
3. Use exploration workshops to: (a) achieve a general awareness of the need areas, (b) reach consensus by all faculty on a set of assumptions about the need area, (c) explore possible approaches to deal with the need area, and (d) reach consensus on one general approach that represents an agreeable solution to the need area.
4. Use skill development workshops to: (a) develop the critical knowledge and skills necessary for implementation of the programs and/or practices associated with the general approach, (b) enable faculty to try out skills and experiment with practices in their classrooms, and (c) reach consensus on the specific elements to be included in the new program and on a starting date for a total faculty/ administration effort.
5. Secure administrative arrangements for implementation of the new program.
6. Provide on-site technical assistance (coaching for application session) to help faculty implement the various elements or programs in their classroom or area of responsibility.
7. Obtain consensus by faculty and administration on a process for making changes in the program and initiate collaboration seminars (sharing session).
8. Secure arrangements and support structures to maintain the new program or practice on a permanent basis.

Each of the above processes and/or events has been found to be critical to the collaborative development and adoption of new programs and practices.

Strategies for Teacher, Administrator, Faculty Empowerment

Professional empowerment is defined as a set of structures, processes, and/or behaviors that result in individuals believing they have increased control over their professional environment. The set of beliefs and self-perceptions one has about their ability to control and manage their professional world has been coined by Ashton (1985, 1986) as professional efficacy, or more specifically "teacher efficacy" when referring to the professional environment of the classroom teacher.

Traditionally, research on the motivational construct of teacher efficacy was based on the teacher's perceptions or beliefs in self-regarding capability to influence student learning. This focus is not surprising since early studies with this construct detected significant relationships between teacher's efficacy and student achievement (Armor, et al., 1976; Berman, McLaughlin, Bass, Pauly, & Zellerman, 1977). However, the implications of this construct led to conclusions

that are too simplistic since personal beliefs about one's effectiveness regarding influence on others probably is a multidimensional phenomenon.

Borrowing from ideas proposed by Bandura (1978), Ashton (1985) in her review of the research on teacher efficacy points out that efficacy is a multiple-determined trait influenced by one's behavior, beliefs, self-perceptions, and environment.

In presenting a "blueprint" for empowering teachers, Maeroff (1988) suggests three key areas in which teachers can be lifted to increase their sense of professional efficacy. These are: 1) their status, 2) their knowledge, and 3) their access to decision making. Strategies which are designed to involve teachers in shared decision making and in the determination of school policies and curriculum can provide the teacher with a sense of professionalism as well as personal dignity. Opportunities for collegial interaction in an environment which is often plagued with isolation, time pressures, paperwork, and feelings of little personal influence must be provided and sometimes even forced in situations where feelings of low efficacy have become a way of life. In addition, the old adage that "knowledge is power" remains true for the professional setting. Teachers need opportunities to increase their knowledge base in critical areas of their profession.

It is proposed here that the low degree of efficacy which Maeroff (1988) characterizes as a trait limited perhaps to teachers in the educational realm extends in varying degrees to role groups other than classroom teachers. School administrators, teacher education faculty, and higher education administrators, in spite of their positions of authority, often feel powerless to effect a positive change in their professional world. Demanding limitations of bureaucratic structures and processes are frequently given as reasons why changes cannot be made and goals cannot be achieved.

Parallel with the three key areas for teacher empowerment described by Maeroff (1988), the planners of the collaborative effort between Western Kentucky University and local school districts are focusing on three strategic areas: (1) prizing each professional's role and contribution, (2) developing each professional's knowledge base, and (3) providing each professional with access to the decision-making process that effects their professional world. The planners see the collaborative effort between Western Kentucky University and public schools, in the creation of Professional Development Schools, as providing excellent opportunities for teacher/professor/administrator empowerment.

The Empowerment Driven Collaboration Model

At Western Kentucky University, the emerging model for building a university/school collaborative is to combine what we have learned about successful

structures for collaboration and about teacher/professor/administrator involvement processes that are critical to program development. To these structures and processes we add the three elements of empowerment: (a) prizing, (b) knowledge development, and (c) access to decision making. The Center of Excellence has become the "temporary system" where the university/school cooperative enterprise is built through projects using the new collaboration model. Because the Center of Excellence Program as a temporary system is more likely than our schools or institutions of higher education to provide an environment of innovativeness, trust, egalitarianism, and excitement, we are attempting to focus our collaborative efforts in the Center. Then as we learn more about how to work together in a common effort, we plan to incorporate these structures, processes, and empowerment strategies to a greater degree in our local organizations and institutions.

During the spring of 1989, Western Kentucky University will pilot a new mentoring program for 24 student teachers in collaboration with Bowling Green Schools, Simpson County Schools, and Warren County Schools. Two collaborative decision-making bodies govern and support this cooperative enterprise: 1) a Planning/Steering Committee consisting of teacher, principal, faculty, central office, and college staff representatives, and 2) an Executive Council consisting of the three school superintendents and one associate each, the University President, the Vice President for Academic Affairs, the Dean of the College of Education and Behavioral Sciences and his two staff deans, the head of Teacher Education, the head of Educational Leadership, the University Director of the Professional Development Center Network, and the Chair of the Faculty Advisory Committee. The Planning/Steering Committee deals primarily with programmatic concerns, whereas the Executive Council is collectively responsible for the allocation of resources. Sharing of power will occur when the controllers of resources (Executive Council) respond to the input and recommendations of the Planning/Steering Committee. While the Executive Council is exploring other possible collaborative projects, the new mentoring program has defined purposes and boundaries that place agreed-upon limits on the collaborative enterprise. The decision-making process is defined. Input may originate from individuals, role groups, or from the membership of the two collaborative bodies. Recommendations for policy development or change based on input may come from either committee, but both bodies must agree to the recommendation before a policy can be implemented. Communication between the two collaborative bodies is the responsibility of the Associate Dean for Instruction, who also directs the mentoring program, and two other representatives of the Planning/Steering Committee. Initially, developmental funding for the pilot mentoring program has been provided

through a special grant from the Kentucky Council on Higher Education; however, permanent funding from sharing of local resources will be a major agenda item for the Executive Council over the coming year.

In an effort to ensure acceptance, adoption, and eventual institutionalization of the new mentoring program, several collaborative involvement processes have been implemented. Key administrators and teacher leaders visited a new mentoring program in its third year of operation at the University of Virginia last May. Administrative arrangements for the implementation of the spring pilot program were made with the principals at each school and with the director of student teaching at the University. Based on the design for the mentoring program developed by the collaborative planning committee, awareness sessions were conducted at each school and qualified experienced teachers were contacted to secure their participation as mentors in the program. Those teachers who agreed to serve as mentors for student teachers in the program successfully completed 18-24 clock hours of intensive training in the roles of mentoring and classroom observation conferencing with student teachers. Throughout the spring semester, technical assistance will be provided to help each teacher mentor adapt the training he/she received to their individual situation in working with a student teacher. Formative feedback on the program will be collected throughout the semester to effect those modifications that will create the optimum asset of growth experiences for student teachers. At the close of the spring semester, program participants will be interviewed by members of the Planning/Steering Committee. The summative evaluation of the spring semester pilot program will provide input for program modifications to be implemented in the second pilot effort to be conducted in the fall semester of 1989.

Prizing teachers', administrators', and professors' professional contributions to the new mentoring program has been demonstrated by a number of specific actions. Committee members have been compensated for their professional contributions to the design of the program. Teacher mentors are: paid $600 for their participation and for serving as mentor teachers in the pilot program; appointed as clinical instructors for a period of 18 months; and given a faculty library card, faculty discounts at the university bookstore, inclusion on the university faculty mailing list, a university faculty/staff ID card, etc.

Knowledge development for teachers and principals has been implemented through teacher effectiveness training. Feedback from teachers on both the effectiveness training and the mentoring training has been excellent. Evidence shows that this training has increased teachers' professional efficacy signficantly. Participating administrators report that they believe instruction throughout their school improved by faculty participation in the teacher effectiveness training.

Access to decision making is a process built into the program from its conception through the collaborative structures and processes described earlier. In an innovative developmental effort like the mentoring program, it is relatively easy to involve teachers in the decision-making process in a manner that they can actually see how their input has an effect on the director of the program. A far more difficult task is getting teachers and professors to see their input effecting change in the permanent organization of the school, colleges of education, or departments.

The collaborative effort of the new teacher mentoring pilot program for student teachers is a temporary system that hopefully will become institutionalized. The collaborative structures and processes, as well as the empowerment strategies, are developed as desirable examples of structures, processes, and behaviors we would like to see duplicated in the school and the university. Through this collaborative effort, methods for shared decision making; processes for adopting innovations; and strategies for teacher, professor, and administrator empowerment will be tested and then implemented in the more permanent organizational structures of the school and the university.

References

Ashton, P. (1985). Motivation and the teachers' sense of efficacy. In C. Ames & R. Ames. (Eds.), *Motivation in Education (Volume 2)*. Orlando, FL: Academic Press.

Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist, 33*, 344-358.

Bronfenbrenner, U. (1976). The experimental ecology of education. *Educational Researcher, 5*, 5-15.

Hall, G.E., Loucks, S.F., Rutherford, W.L., & Newlove, B.W. (1975). Levels of use of innovation: A framework for analyzing innovation adoption. *Journal of Teacher Education, 26*(1), 52-56.

Maeroff, G.I. (1988). A blueprint for empowering teachers. *Kappan, 69*(7), 472-477.

Pankratz, R., & Williams, J. (1974). *Three years of collaboration in the development of portal schools*. Paper presented at the National Teacher Corps Conference, Washington, D.C.

Pankratz, R., Tanner, J., Leeke, J., & Moore, B. (1980). *Planning for institutionalization: The Continuation of new programs and practices*. Omaha, Nebraska: Center for Urban Education. University of Nebraska at Omaha. Teacher Corps Developmental Training Activities.

Teacher Education Which Promotes the Merger of Regular and Special Education: Challenges and Opportunities

Mara Sapon-Shevin
University of North Dakota

Concurrent with, but often separate from, proposals for wide-ranging education reform have been proposals for the merger of regular and special education, including the federal government's "Regular Education Initiative" (Will, 1986). Unfortunately, discussions about merger are often relegated to those who identify themselves as "special educators," and there has been little interface or dialogue between those advocating broad-scale educational change and those whose interests have typically been identified as "special education" or "children at risk."

However, remedial, entitlement, and enrichment programs in an increasing number of schools involve a majority of the school population, forcing the realization that the future of children identified and labeled as handicapped, gifted, underachievers, minority, and bilingual is not a special education issue. Rather, we need to consider all children as part of the intended beneficiaries of educational reform (Lilly, 1988; Reynolds, Wang, and Walberg, 1987; Stainback and Stainback, 1984; 1987). It is important that relationships between general education and special education not be expressed through separate subgroups, task forces, or conferences; these issues must remain part of the general dialogue of reform, must involve all the stakeholders in the change process.

Another relationship which is often neglected is that between school reform and reforms in professional development, particularly teacher education. The movement towards merger and towards the implementation of school programs which are more intentionally heterogeneous have direct implications for how all teachers are prepared, and must be considered as part of the teacher education reform agenda (Sapon-Shevin, 1988; Stainback and Stainback, 1987). Unless teacher education reform is conceived of broadly, we run the risk that those who identify themselves as advocates for "special education" children will remove themselves from the dialogue, and continue to promote programs which are segregated and categorical.

What changes would be required in how "regular" and "special" education teachers are currently prepared, and what would be the interface between these change proposals and broader educational reform proposals such as those of the Holmes Group (Sapon-Shevin, in press)? How can those in leadership positions promote the kinds of exchange and negotiation between faculty which will lead them to design optimally productive teacher preparation programs for all teachers?

Four panel members raised these and other questions with participants at the 1989 AACTE Meeting, the theme of which was "Collaboration: Building Common Educational Agendas." The presenters included Mara Sapon-Shevin, University of North Dakota; Marleen Pugach, University of Wisconsin-Milwaukee; Maynard Reynolds, University of Minnesota; and M. Steven Lilly, University of Washington. These presenters represented faculty and administrators who have attempted to bridge the general education/special education gap in various ways: through administrative action, by conducting research which focusses on transforming regular education settings to accommodate students with a wide range of individual differences, and through faculty-initiated efforts to develop and document strategies for altering the kinds of preparation given to all teachers in order to prepare individuals who see themselves as broadly capable and committed to serving a wide range of students within general education settings.

The discussion was lively and far-ranging, and focussed on three major areas: structural changes necessary to promote merger, changes in pedagogy which would be necessitated by merger, and the overall philosophical and values commitments demanded by a unified teacher education program. Within each of these areas, presenters and participants shared the current status of their own institutions in the process of merger, their vision of what merged programs would actually look like, and the obstacles and impediments to realizing this vision.

College of Education Structures and the Merger Process

A broad range of relationships between regular and special education was presented by the panel members who drew examples from their own institutions. At one end of the continuum was an institution in which a newly created center within the college had committed itself to program design by faculty drawn across departments who collaborate in course development. The other end of the continuum was represented by colleges of education in which special and elementary education are completely discrete departments, sometimes located in separate buildings, with little interaction between faculty. Reports about how well faculty "got along" were discussed with relation to the level of interaction between general and special education faculty; some administrators who reported that their faculty got along perfectly, with no apparent conflicts, went on to reflect that lack of dissent might relate to the complete separateness of the departments and total absence of interaction of these faculty in any programmatic decision making! Although such conflicts were often painful and lamented by administrators, they were also seen as essential to meaningful debate and negotiation, i.e., "if your faculty aren't arguing, maybe it's because they aren't talking."

Participants explored how colleges of education might be organized in order to promote collaboration between faculty who have traditionally seen themselves as separate and often as antagonistic. The conversation explored the relationship between teacher education programs and what happens in public schools, and the ways in which dichotomous, dysfunctional school programs often have their parallels and origins in colleges of education. For example, one obvious barrier to school integration is the physical separation between classes for children labeled as "special" and those identified as "typical," and the accompanying separation of their teachers. Many colleges of education mirror this separation, with special education and general education departments housed on different floors, sometimes in different buildings. Just as elementary schools implementing integration have recognized the importance of physical proximity in promoting positive interaction, these same principles must be operationalized in schools of education. Faculty members in elementary and special schools should share drinking fountains, bathrooms, and office space if they are to communicate on an ongoing basis and if they are to find the common ground for their teaching and their beliefs (Sapon-Shevin, 1988). It is within teacher preparation programs that teachers learn their roles and their relationship with others who are differently prepared. Students learn the differences between the general education system and special education programs, and they often learn about these differences within highly compartmentalized, segregated schools of education. Administrators were asked to consider how committee and teaching assignments were made and the extent to which faculty were given opportunities to work together, know one another, and discover areas of shared interest and concern. Several faculty members discussed the extent to which they often felt penalized (by increased load) for their attempts to undertake team teaching and other collaborative teaching efforts, i.e., on whose load did a specific course count? One administrator shared his success in having two faculty slots--one in remedial reading and one in learning disabilities--redefined so that both positions were filled by faculty who transcended narrow departmental definitions and who had broad responsibility for courses which were held in common by the two departments.

General education and special education faculty often do not see themselves as equal participants in the change process, and this inequality can be destructive. One group (often special education) cannot be asked simply to "bless" the decisions of another program area without actual participation in the decision-making process. In one institution in which all special education majors must first have an elementary degree, the elementary faculty met for an extended period to redesign their program (adding and deleting courses, changing requirements) without any formal mechanism for the participation of special education faculty.

When the changes were announced, there was, predictably, considerable anger and resentment about the exclusionary process and resistance to the subsequent program redesign. Several special education faculty then initiated efforts to disconnect their program from the elementary education program--clearly not an action compatible with a move towards merger! The importance of involving all faculty in the change process--from the outset and on equal footing--was emphasized. Because long histories of separation and the disenfranchisement of individual faculty who are viewed (or view themselves) as peripheral may have narrowed the domains in which people are willing or able to assert their influence, administrators may need to convince faculty members that they do have expertise and valuable input that must be shared with other areas.

The impediments to this restructuring are numerous, and include both structural and philosophical barriers to integration. Funding mechanisms (which encourage discrete program design), grants which are allocated to specific departments, and state standards which require discrete program certification and course work were all cited as external constraints on merging programs. When we fail to pursue new options, when we cite "regulations and standards" as the reason we can't do things differently, is the external standard really the problem, or simply the embedded way in which it has been interpreted? To what extent have both faculty and administrators become reactive rather than proactive, responding to outside demands rather than initiating programs and changes they feel they can "own"? In our attempts to regulate quality, have we actually succeeded in promoting mediocrity and limiting creativity?

How do we restructure faculty members' thinking so that they see themselves not, for example, as "special educators," but as "teacher educators" who are part of the broader community? How do we create conditions and requirements that force interaction among faculty, that increase people's willingness to open their minds to new possibilities? In discussing this issue, panel member Lilly encouraged experimentation and risk taking, and quoted Pogo who said, "We have met the enemy and he is us."

The role of leadership in changing role relations within colleges of education and encouraging collaboration was deemed critical, particularly the role of administrators in creating a climate of basic trust and parity. Implementation suggestions ranged from those which could be operationalized within existing college structures to those requiring more radical reform. Within the current, often dichotomized structure, administrators can support collaborative program development and teaching, encourage shared research projects, and make sure that stakeholders from across many departments and disciplines (special education, reading education, multicultural education, bilingual education, educational administra-

tion) are included in the dialogue. More radical restructuring might involve eliminating separate departments of special education and reconstructing departments of teacher education or teacher preparation which include all those faculty who prepare preservice teachers. Although more extensive restructuring might involve a five-year (or more) plan, such goals should not be abandoned in the face of the reality of the day-to-day struggles which often leave us exhausted, discouraged, and ultimately, short-sighted.

Pedagogic Reform: What do teachers need to know?

If colleges of education were to be restructured to reflect a more collaborative, unified approach to teacher education, how would the pedagogy be transformed, and what might it look like after that transformation? The following questions were raised and addressed in this area:

1. What teaching skills or competencies can be identified as "generic" to the extent that all teachers must have them in order to work with a wide range of students?
2. At what point in teacher education should specialization occur and what should be the nature of this specialization? Are there, indeed, special skills which are unique to "special education," and, if so, should these be maintained as additional preparation or integrated into a common program? Should specialization continue to be provided to parallel certification (i.e., by categorical label), or might this specialization instead take the form of subject matter or pedagogy-specific expertise?
3. What are the barriers to the redefinition of what constitutes teacher education pedagogy, and what is the relationship between pedagogic reform and the structural changes and role-definition (and role release) described in the previous section?

One way of approaching the transformation of the pedagogical content of teacher education involves a zero-based curriculum building model, i.e., starting from scratch in thinking about relevant or essential content. The major impediment to this kind of thinking, of course, is the existence of specific courses, often of long standing, belonging to specific faculty members within separate departments. Although the content of specific courses may lack external validity and may overlap with other courses, embedded departmental structures, lack of communication, and faculty ownership of courses often preclude the shared investigation necessary for restructuring. In many colleges of education, for example, students in elementary education take a course on classroom management, and students in special education take a course in behavior management. Working from a zero-based model would involve closely examining the content of these two courses, determining the validity and importance of the material contained within it, looking

for areas of overlap, and then, determining three things: 1) What content is of such importance that it should be designated as essential for all students; 2) What content is actually unique to a specific population and might reasonably be maintained in a discrete course or module; and 3) What content is actually archaic, irrelevant, or unsubstantiated and therefore should be eliminated from any such course?

In a study of the methodological content of teacher education for learning disabilities, Pugach and Whitten (1987) found that the content of many learning disabilities programs closely paralleled that of general programs of teacher education. Both learning disabilities and general education programs taught metacognitive strategies, direct instruction methods, and cooperative learning techniques, leading them to ask "whether it is appropriate to base separate programs of teacher preparation on methodologies that do not appear in reality to be specialized" (p. 299).

This kind of analysis, of course, can be extremely threatening to individual faculty since, in addition to forcing an examination of the value of what we teach, it also challenges notions of academic freedom, and forces us to look seriously at issues of turf-protection and territoriality. Faculty and administrators who have attempted curricular change are well aware of the difficulty many faculty members have letting go of specific topics they have "always taught," and feel ownership of. The kind of scope and sequence planning more common in elementary schools, a systematic tracking of where a topic is introduced and how it is developed over time and over courses, is often absent in university programs. One faculty member, for example, became aware that four faculty members were introducing cooperative learning to students in four different courses (Classroom Management, Introduction to Teaching, Learning Styles, and Social Studies Methods) but that those faculty had never interacted nor strategized how to eliminate redundancy and overlap to provide students with the broadest possible exploration of the topic. Faculty members who have developed teaching units and materials and who have experienced success with a topic are often reluctant to relinquish this privilege, even when the result is poor program articulation.

Rethinking our curricula also involves reconceptualizing faculty roles within the institution. When an inservice teacher is working on teaching math skills to students labeled as "educably mentally retarded," to whom should that teacher turn for support and resources, the math methods faculty member or the special education faculty member who teaches "Methods for EMR"? In many faculties of education, the teacher seeking support (if she identifies herself as an "EMR teacher") is unlikely to even think of the math methods person as a resource, thus, perpetuating the false dichotomies of the institution: math methods means math

to all students. Pugach (1988) has argued that the existence of special education works to de-skill general classroom teachers by removing students with special needs from their classrooms and thereby removing their own sense of responsibility for or ability to teach a wide range of students. The existence of discrete departments and courses within colleges of education similarly de-skills teacher education faculty, by not challenging the separateness of courses and structures, and by not providing, for example, the math methods faculty member with the need to redefine her/his areas of expertise and responsibility.

Administrators can play a significant part in helping faculty to redefine the scope of their responsibilities in several ways. These include sending general education faculty to meetings of more specialized groups--for example, sending the language arts specialist to a meeting of the Council for Exceptional Children--and by including special education faculty in more generic reform efforts. Serious attempts must be initiated to make special educators feel that their concerns for quality education are reflected in the more general debates on general education reform. Concurrently, general educators must be made to feel that they can have a voice and legitimate opinions about ongoing debates concerning the reform of special education. Faculty cannot be permitted to hide their agendas or limit the discourse by claiming specialized knowledge and using particularistic jargon which closes the discussion rather than opens it. A process of mutual exploration and education is necessary in order to promote authentic conversation and debate on the path to renegotiation and redefinition.

Towards a commitment to unification

The long history of separateness and poor communication between special education and general education both originated in and perpetuates feelings of distrust and fear. Sapon-Shevin (1988) has described this situation as follows:

> Lack of clear communication about what a merged system would actually look like obscures the dialogue. Feeling threatened, special educators and general educators pull their wagons in a circle; the discussion becomes self-limiting, special educators talking to each other only, and people defend themselves against attacks that were never issued. In actuality, no one argues that the "regular education" system, as currently constituted, is the optimum learning environment for children with learning problems (or for anyone else for that matter). And yet, many special educators, feeling attacked by proposals to alter their roles and profession radically, counterattack with criticisms of the general education system. The point isn't that special education is flawed and regular education is perfect. The point is that schools cannot operate successfully with a dual system; we must create a new reality. (p. 105)

In order to facilitate the kind of process which will promote necessary change, three things must happen. First, there must be a commitment to involving all possible stakeholders--teachers, students, parents, administrators, teacher educators--in the deliberation. At a pragmatic level, we recognize that the process must be inclusive because children's lives, school programs, and teacher education are all embedded within complex social, political, economic, and historical realities. Changing any part of the mosaic involves pushing other pieces of the design as well, looking for relationships, recognizing connections. But there is also a strong philosophical imperative which pushes us to an inclusive discourse: the need to look at all children--and all people--as part of the same community, to explore our own feelings about diversity, and to communicate clearly our own perspectives and values about our shared humanity.

Having engaged a wide range of individuals in the dialogue, we will then have to explore the extent to which we hold shared (or different) meanings about terms like "integration," "merger," and "inclusive communities." Who do we, as educators, include in our vision of the whole school community? Do we truly believe that neighborhood schools can and should meet the needs of all children, including all children with disabilities? Or does "merger" refer only to eliminating programs for children considered mildly handicapped? What about the newest (and vaguest) category of "children at risk"? Who are these children and what are they at risk of? School failure? Exclusion? Marginalization? What might schools look like that do not wait for children to fail before providing services? What kinds of school restructuring would inclusive schools require, and what would be the role of university-level educators in this reconstruction? What kind of teachers would it take to provide a quality education to all children, and what kinds of preparation could ensure the willingness and ability of teachers to teach all children?

The change process will be a difficult one, for it will occasion not only debate between those identified as "general educators" and those who see themselves a "special educators," but it will also expose deep rifts within the field of special education. The willingness of special educators to publicly share their own divisions and conflicts will depend on the extent to which they feel supported and comfortable participating in such an exploration with those they have perceived as "outsiders," especially those in general education. It will require thoughtful leadership to create safe spaces for this kind of conversation and to ensure that all participants feel free to voice their perceptions and values.

The interchange will be far-reaching and must include many voices, but it is also important to talk about <u>where</u> such discussion must take place. If we are serious about the proposition that school reform means school reform for all children, and

that an examination of children who are currently outside the system or poorly served by the system must again become central, then this debate must take place in central places. In addition to the deliberations about merger and the REI which occur at specialized meetings like that of the Council for Exceptional Children, we must ensure that organizations more broadly concerned with teacher education and school reform continue to explore these issues as well. The meeting described in this paper provides an example of the necessity and the utility of engaging a wide range of "general" faculty and administrators in the debate. The process is likely to be protracted, emotionally laden, and difficult, but it is essential that we continue; only through shared dialogue and mutual commitment can we begin to envision and create the schools we desire.

References

Lilly, M. S. (1988). The regular education initiative: A force for change in general and special education. *Education and Training of the Mentally Retarded, 123*(4), 253-260.

Pugach, M. C., & Whitten, M. E. (1987). The methodological content of teacher education for learning disabilities: A problem of duplication. *Learning Disability Quarterly, 10,* 291-300.

Reynolds, M. C., Want, M. C., & Walbert, H. J. (1987). The necessary restructuring of special and regular education. *Exceptional Children, 53,* 391-398.

Sapon-Shevin, M. (1988). Working towards merger together: Seeing beyond distrust and fear. *Teacher Education and Special Education, 11,*(3), 103-110.

Sapon-Shevin, M. (in press). Special education and the Holmes' Agenda for teacher education reform. *Theory into Practice.*

Stainback, S., & Stainback, W. (1984). A rationale for the merger of special and regular education. *Exceptional Children, 51,* 102-111.

Stainback, S., & Stainback, W. (1987). Facilitating merger through personnel preparation. *Teacher Education and Special Education, 101,* 185-190.

Will, M. C. (1986). Educating children with learning problems: A shared responsibility. *Exceptional Children, 52,* 411-415.

Summary

It is obvious by the enthusiasm and dedication of the presenters examining role relationships between schools and universities that they believe linkages are the essential ingredient for both parties to help bring about fundamental changes in the schools and the university.

Leaders in the university visualize teacher education programs which are jointly planned and shared with school systems that have many activities which will serve as laboratories and excellent learning experiences for college students. Leaders in the public schools visualize collaborative arrangements with the university to help bring about reform agendas.

Ann Lieberman points out very clearly that reform agendas impact on conventional practices which bring about many problems and tensions, and that it takes a long time to build trust necessary to bring about the desired reforms. One of the problems described is that while public schools look to the university to aid in their problems, university research has become distant from the issues of the school. In addition, an overriding problem has been how to transform the research knowledge into teaching practice. There are innumerable meetings and much literature on how to get theory into practice, but all this activity merely illustrates that it is a major concern.

Dr. Lieberman stresses that it is important for school people to practice in research themselves for it is important to have the kind of perspective only they can give. This is also a major point of the University of Toledo study as well as the Alverno College partnership in teaching critical thinking. Again and again the collaborators point out that roles are changed because of the linkages. Teachers involved in the Alverno College project reported changes in their role in the development of curriculum, and insights about their power to effect change and influence practice. University faculty have increased respect for practicing teachers and a greater understanding of the complicated problems of the schools.

Leadership of the partnership is critical. Ann Lieberman states "that we have to have people who have one foot in each culture with a vision larger than the school or university and willing to take risks to create things that neither side actually thought about before." At the University of Toledo, an idea that started as a dream of a single individual has evolved into a significant educational resource for the city of Toledo. And Donald Stewart summarized the theme of collaboration by commenting that building common educational agendas "may be not just the winning strategy, but, in fact, the only viable strategy."

Chapter Four
Context Variables

Karolyn J. Snyder and Robert H. Anderson, editors*

In the program breakdown, one of the five major subthemes was built around the many context variables that affect the success of collaboration. In addition to the attention that was paid to this subtheme by the major speakers and by the symposium reviewed below, there were twelve sessions in which context variables were examined. Seven focussed primarily on research, two explicated theory, and three provided examples in practice.

One of the presentations dealing with theory explored the habits of isolation that are brought into the university by former students, teachers, and/or administrators who become involved in teacher education. Most of their prior experience has been in individualistic and competitive K-12, undergraduate and graduate schooling, and, in addition, the university context does not typically nurture communication and active collaboration. Therefore, successful work in collaborative partnerships requires a major reorientation on the part of professors, whose obligation (and opportunity) is to model cooperation within the teacher education program.

Also, a research-oriented presentation used data from a teacher induction program to demonstrate how Edward T. Hall's model of "Culture as communication" reveals context variables that influence the success or failure of novice teachers. Another paper examined problems that arise when the partners in collaborative programs, e.g., in the supervision and evaluation of students teachers, do not share a common philosophy or orientation but instead function out of conflicting paradigms. Another dimension of difficulty in partnership and/or collaboration is found in the assumption that common visions or goals are shared along with common definitions of how collaboration can and should take place. One report noted that discrepancies in assumptions are often found, and examined

---

*Karolyn J. Snyder is Professor of Education and Director of the School Management Institute at the University of South Florida. She has influenced the professional development of principals throughout the United States with, Managing productive schools: Toward an ecology, co-authored with Robert H. Anderson. Her research has focused on leadership development needs and work culture. Robert H. Anderson, who served on the Board of Directors of AACTE while Dean of the College of Education, Texas Tech University, is now a part-time Professor of Education in the Department of Educational Leadership, University of South Florida. Since 1977 he has also served as President of Pedamorphosis, Inc., a nonprofit corporation promoting educational change through leadership development.

the need for identifying a common language and a shared vision. In the project, underlying issues in achieving shared understandings included: how membership, as contrasted with participation, is defined; reaching a common understanding of role parameters and responsibilities; understanding what is meant by "shared" decision making; determining responsibility for providing resources; creating a structure responsive to the needs of both the school and the university; balancing the long-term research interests of one group with the other group's need to "take home and try" new strategies; learning to speak a common language; and operationalizing a shared vision of collaboration.

Among the most common forms of school/university partnership is in the recruitment, selection/screening, and preparation of new or future teachers. In the total conference, many such partnerships were discussed. Also frequently mentioned were examples of peer coaching, mentoring, supervision, and other activities intended to help teachers in service to augment/sharpen their skills. One urban elementary district reported on a peer coaching system, involving grade-level "triads" each including a veteran teacher, a less experienced teacher, and a novice. Although the teacher union originally objected to the plan because it was designed "top down," the provision of substantial financial support, plus the involvement of a university professor, helped to overcome the difficulty. That evaluation should be based on student test scores, as well as participants' views, was a precondition of the financial support. Initially, the triad teachers, with their traditional views of supervision and of hierarchy, were confused by the emphasis upon peer coaching and information exchange not geared to seniority. Adjusting schedules for easy access to each other proved to be complicated. How best to use consultant services was a skill that had to be developed. Teachers had to adjust to "taking charge" of the coaching/consulting situations. The overall result of the project was positive, and as the project expands one concern of the teachers, requiring further adjustments, is that they were away from their classes for too many minutes each day. This presentation is featured in this chapter.

A Canadian presentation involved a case study of the exemplary "extended practicum" for teachers, supported by teacher-intern workshops and by the provision of out-of-pocket program expenses, that was incorporated into bachelor of education degree programs in the early 1970s. Contextual factors that had led to the extended practicum derived from the province's unique history, including support of a socialist government and of the first medical care insurance program. However, in the late 1980s there are in that province emerging economic, political, and cultural forces that appear to threaten collaboration and therefore the continuation of the extended practicum. Among these forces are low prices for

products, changes in government priorities and personnel, and increasing cultural diversity. The researchers propose that new shared visions incorporating reflection-inaction may be a way to narrow the theory-practice gap, along with a career orientation to the professional development of teachers and increased sensitivity to contextual factors.

Successful interorganizational collaboration depends considerably upon generic attributes that have been identified in research since approximately 1970. One of the conference reports delineated five of these attributes: 1) promotive interdependence, 2) a balanced interchange of valued commodities, 3) a renegotiated pluralistic order; 4) continuous environmental scanning and adaptation, and 5) a multifaceted enabling network. The same researchers then noted that each organization must determine the extent of its capacity to collaborate, and given insufficient capacity, it may be best to postpone ventures into partnership.

Positive preconditions for involvement include: 1) organizational values that lead to the development of structures and processed for managing promotive interdependence; 2) internal objective linkages that foster mutual goal attainment; 3) ongoing assessment of the availability and relative value of interchangeable commodities; 4) institutional structures to facilitate environmental scanning; and 5) top-level administrators with supportive beliefs and knowledge.

Many of the changes now popularly recommended or discussed in the literature have been mandated by state legislatures or agencies, and ability or willingness to carry out such mandates will vary from group to group or situation to situation. Within universities, there is often a "clash of cultures" within and between the several university units that may be involved. Specifically, there may be very diverse perceptions of the need for improving teacher education, or the school curriculum, within the School/College of Education and the other schools or colleges such as Arts and Sciences, Technology, or Creative Arts. There may also be differing perceptions of the locus of responsibility for producing quality teachers and helping schools to improve. The clash is further illustrated by differing understandings of the teacher's role, of appropriate instructional methodology at various levels, and even of human learning. One of the conference papers, involving a case study in a particular university, noted that the several subunits respond to change challenges in ways related to their own unit or discipline, rather than in ways related to the total organization's goals and needs. Therefore, the characteristics of the organization's sub-units can mitigate the effectiveness of collaboration, and the policy history of the organization can impede collaborative efforts and demand the resolution of old conflicts before new conflicts can be addressed. Policy formulation is symptomatic rather than systemic, and constraints are often not addressed or even recognized by policy makers. More

knowledge is therefore needed about organizational change, and especially about intra-organizational collaboration. Higher education's failure to address its multiple cultures is therefore a contributing factor when collaboration fails.

Other sessions dealt with preservice diagnostic assessment for identifying promising future teachers; synthesis of research and practice aimed at improving classroom instruction and learning; and the mixed consequences of state-mandated tests of basic skills in teacher education.

Remarks of the Major Speaker

The Fifth General Session in the convention, related to the "context variables" subtheme, was delivered by Bill Honig, Superintendent of Public Instruction for the State of California. The transcript of his address totals 28 pages, and here we must necessarily abbreviate, condense, and summarize in order to meet space limitations. An effort was made to include all of the topics and arguments introduced by the speaker, and although some specific examples were omitted, it is hoped that the overall message is here faithfully reported.

Revitalizing Teacher Education Programs

Bill Honig
Superintendent of Instruction, State of California

Many efforts are underway throughout the country to define exactly what is meant by a professional, certified teacher. These efforts must correlate with the question, "what kinds of youngsters do we want the schools to produce?" In California, the effort is guided by three purposes. First is that the changing job market requires that far more students be prepared in areas once reserved for the elite, such as oral and written communication skills, higher-level thinking and conceptual skills, general cultural understanding, rudiments of algebra and mathematical thinking, scientific understanding, and more. Second is to prepare teachers, themselves dedicated and informed members of the democracy, to instill in pupils the intellectual knowledge, the deep understanding of our governmental system, the willingness to act ethically, and the willingness to participate that is necessary for our democratic society to thrive. The third objective is to give youngsters the perspective, the broad cultural understanding, and awareness of the world that enables them to exercise wisely the privilege of making choices.

What we used to call liberal education, and what we now call cultural literacy, is necessary for all children to acquire. How the world works, what is happening in the world and how things fit together, and what things are important; all of these must be deeply understood so that all youngsters can "have their individual shot at the good life."

All free men and free women deserve this sort of liberal education, and, in fact, such an objective hasn't changed in the last 50 or 100 years, although to accomplish it is a huge and complicated task. It is one that will take a maximum effort across the board, not just in universities but also in schools with teachers and educational leadership involved. It will require funds for investment in staff development and curriculum development. To succeed in the effort with so diverse a student body will require a lot of learning together and collaboration on the part of everyone.

Schools of education cannot accomplish the three major objectives by themselves. Preparing teachers is a long time sequence, for which the undergraduate experience is a crucial first step. For example, the new history sequence in California calls for three years of world history and three years of American history, and a lengthy and focussed undergraduate program is necessary as preparation for teaching it. The same is true of science, math, culture, and other areas.

California has been developing an assessment system for checking on the knowledge base and understanding of prospective future candidates coming into the school of education. Similarly, in the schools of education there is reflected a sense of partnership with the assessment people as the frameworks from the state are used in the courses offered. The school of education experience itself is step two in the preparation of competent professionals. The Carnegie Five Points are useful guidelines. The first realm calls for teachers to be committed to students and to understand the varying, individual circumstances out of which they come. The second has to do with teachers knowing the subjects they teach, the backgrounds of those subjects, and what experience and research over many years have helped us to know about methodology. Third, there is much that we already know about how to organize classes, how to monitor learning, and how to assess learning. There is an abundance of useful information about pupil grouping (e.g., the Joplin Plan), cooperative learning, reciprocal learning, reading modalities, time-on-task, etc., as well as pupil assessment, to which teachers-in-preparation must be introduced.

One of the strong influences in my own experience came from being in the Teacher Corps program, which gave participants the sense of a "collective." Being isolated in a classroom, without really working as a group in a school, was bothersome. Adult collaboration, now part of what we call restructuring, is needed both emotionally and functionally if you are to succeed in teaching. By causing us to talk with each other as a group of candidates going through a preparation program, Teacher Corps served a very good purpose. And what we learned together about the importance of being good team members and solving our various problems together, helped us to do a better job of meeting pupil needs and reaching out to parents and community. In Japan, where I recently visited their schools, the teachers (particularly in elementary schools) do a great job in using manipulatives, stimulating creative learning, getting children emotionally connected to the school, and working with the parents. Significantly, rather than a graduation ceremony, they have an entrance ceremony, which is a special celebration attended by parents wearing their best clothes. Then, for about three weeks, children are introduced to the school, their desks, the school procedures,

etc., all intended to help them feel comfortable and supported. School spirit is developed from the start, and children feel an emotional connection.

American teachers all feel that they have to do everything themselves in their own classroom. This is wrong. What is needed is a total faculty effort and a feeling of togetherness from which children will benefit. Finally, there is the concept of the teacher as a continual learner. American educators, sad to say, do not read enough. This is true of teachers, principals, and even teacher educators. There are many, many ideas constantly being generated in education, just as there are in medicine, law, and other professions; but doctors, lawyers, and others make a far greater effort than teachers to keep up with the literature. This situation must change, and if future teachers are coming out of schools of education unfamiliar with important new books and/or the ideas of important researchers, they are not being served well.

Once in service, for at least the first three to five years, a teacher is still in a learning situation. One way to help them is to connect beginners with mentor teachers, selected from the brightest and the best, who can work with them on a continual basis. California has a state-funded mentor program which pays an additional $4,000 each to some 9,000 teachers who have been selected for this important responsibility.

Assessment is a challenging task as we seek to develop better teacher education programs, and legislation is in place to help us determine what assessment strategies ought to be in place. A main focus in 15 new teacher training projects throughout our state is development through cooperative effort of decisions and recommendations concerning assessment in terms of licensure and credentialing and also how to help professionals succeed as they come through the system.

Collaborative action also involves the Commission on Teacher Credentialing (CTC) and the State Department of Education; several state universities being given some developmental money; within-university efforts to bring subject-matter specialists (e.g., science) and education professors together; teacher retention programs, especially in inner cities, with the school districts, schools of education, and the state department providing support for teachers in their first year or two; and some projects trying to encourage undergraduate students through work-study funds to go out and work with middle school and high school pupils.

This latter effort relates to the need for a major effort in teacher recruitment. When California raised its standards for entry into schools of education several years ago, despite the need for about 150,000 new teachers in a decade, many questioned that action. What happened, however, is that education became a more attractive profession and enrollments jumped up dramatically. Salaries have also gone up, to be sure, but kids are interested in a fulfilling career and a "stronger

cut" of person is coming into the field. The major problem, however, is attracting minority candidates into education, and this calls for a concerted societal effort to broaden the pool.

Such effort must begin with getting more minority persons while still in the public schools to think about going to college. California has some strong programs underway where potential talent is identified in the freshman class, support and modeling are provided for them, the "emotional connection" (see my earlier remark) is made, and the group's interest in going to college is bolstered. An example is the Crenshaw High School, in a Los Angeles ghetto area, where a future teachers club was started with green jackets and emblems and lots of other motivational aspects. Two more points need to be made. One is about the extreme importance of staff development to "keep our existing staff up to speed." Needed are strong frameworks in the subject areas, with state-of-the-art documents that can be very helpful to inservice teachers. Also needed are conferences and other opportunities for teachers to come together to hear about new concepts and/or practices, discuss and understand them, and acquire the necessary skills to implement them. Education lags far behind the armed forces, major industries, and other professions in providing personnel with the training funds to "make sure they know what is going on."

In short, we need to make sufficient internal capital investments in our people. And we need a coordinated effort to make sure that this happens. How best to deliver staff development and who should be responsible for it remain challenging questions. The technology is surely available, and big corporations provide models that could be followed. But how to coordinate and manage all the necessary initiatives will be a huge problem. Surely the theme of this conference is well related to what must be done. In this country people are starting to realize and believe that the quality of life depends on the effectiveness of our schools. Examples of stronger state support, such as Proposition 98 in California which asks the public to put a financial guarantee at the state level into the constitution, are appearing. Political leadership is also showing more than lip service support for making adequate resources available. But our job is to figure out how all the groups in education can work together to get professional agreement on what is important, how to go about getting it done (with flexibility), and how to assure ourselves that the necessary steps are at last being taken.

Summary of Symposium Four

Improving Education Through School/University Collaborative Efforts
Helen Greene

The organizer and chairperson of the fourth symposium was Helen Greene of Long Island University. Other participants included two superintendents of schools (Donald J. Behnke and E. Tom Guigni), an associate superintendent for instructional services (David Splitek), and two university-based educators (Robert J. Krajewski and John Sikula). The first presentation was made by Krajewski and Splitek, who described collaborations underway in the San Antonio (Texas) area. Then followed Behnke's report of four collaborative efforts involving his district, on the east end of Long Island, and Long Island University. Helen Greene followed with comments on the university's many partnerships with school districts. The symposium was completed with another report of university/school district collaboration, this time by Guigni and Sikula, both of California. The geographic spread of the examples provided a useful perspective.

As often happens in conference presentations, much information was provided via overhead transparencies, none of which were later available to the editors. What follows derives entirely from the recorded transcript, and although much of it was essentially conversational, we hope the essential ideas presented in the symposium have been captured here.

The Texas panelists talked about a Model Schools Program in which a relatively new state university (now in its 17th year) sought to establish some collaborative programs with school districts, especially focussing on multicultural dimensions. Within the university there had not previously been any unified effort to work with school districts dealing with a multicultural population and therefore generating faculty involvement "took some doing." The largest of the school districts, which by contrast dates to at least 1885, has 60,000 students, 88% of which are minority, and has a rigid bureaucracy whose primary concern over the years has been survival. For the school people, becoming involved with a university did not have very high priority. However, the president of the school board and the president of the university talked with each other about "getting down to the real problems facing education" and this provided a motivating force. Both parties hoped that out of the collaboration would come teachers better attuned to the kinds of problems that an urban school district faces.

Sometimes the initiation of a project can be either facilitated or inhibited by the political or other standing and reputation of the person(s) advocating or pushing it. If the idea is associated with a respected and popular person, support is likelier to be forthcoming than if the opposite is true. The participants must be sensitive to this possibility, and avoid involvements that could trigger blocking behaviors. The panelists briefly reported how this was done.

The selection of the school or schools to be involved in pilot projects must be done carefully. In the larger of the area school districts in the project, the elementary school that was selected from among seven that applied enjoyed lobbying support from local residents who persuaded the school board to select their school. In the smaller school district, one elementary school was also designated. Each of the schools has an advisory council consisting of the principal, a teacher, two parents, the coordinator from the university, two university faculty (one from education and one from liberal arts), and one person from either a museum or the Institute of Texan Culture (ITC). Among related activities are four preteacher training courses offered either totally or partially at the elementary school sites. ITC also helps students to learn a teaching unit during one-week visits, which is then taught to others in one of the elementary schools.

A parent consultation center was established so that parents can "come in and get involved" with the education of their children. There is also a professional development program where teachers at the school(s) are able to get advanced academic training to help them along their career ladders. Some research is being conducted, e.g., a reading project at the kindergarten level. A small tutoring program has been started. Finances have been a problem, especially in light of the rather severe budget situation in Texas in recent years.

The university, although designated an urban university, is actually 22 miles from the city center. Therefore, a perceived need has been to get the university students into the city so that they can see what programs are going on and be less fearful of eventually working there. This has worked out well; and at the same time, the teachers in the pilot school(s) have had their morale and their sights raised by the university connection, and they have come to feel more like professionals. Invitations to do research with professors, to speak at conferences, and even to write up their experiences have stimulated their job satisfactions.

Also noted was that the large district bureaucracy has been very positively influenced by the project and there is more shared decision making and more co-involvement, including collaborative ventures with other nearby universities and with other community institutions such as the zoo, the Botanical Center, and museums. This is leading to more variety in future planning.

Both parties have found it advantageous to have the project coordinator located at the university. Getting the project underway took about a year. Soon, however, signs of activity and of school/community pride began to appear. The connection with the university is valued by the school people and the community, and there is a sense of ownership in the project. Furthermore, access to the school district for research projects is now much greater because of relationships and procedures that have brought good results.

New York: Long Island

The second set of symposium presentations focused on collaboration between the School of Education of Long Island University (LIU) and one of the 157 school districts with which LIU collaborates. After a brief review by Helen Greene, Dean of the LIU School of Education, of the extensive network and the procollaboration philosophy that sustains it, Superintendent Behnke of the Southampton School District described four of the several forms of partnership in existence. That New York State funds teacher centers, collaboratively developed by university affiliates and the local district-level teachers union, helps explain how the project began and is supported. The center's board of directors includes a professor. One of the projects supported by the center is the LIU Social Studies Project. There is also a collaborative program in oceanography and the teacher center cooperative. In the fourth-grade social studies project, the cost-free use of the university computer has been helpful as a way of putting children in touch with each other and, for example, with children from a nearby Indian reservation or with children whose native language is other than English.

In the oceanography program, at the high-school level, students have opportunity to work part-time on one of the LIU campuses with the professor of Marine Science. They also have field-trip opportunities, including shipboard experience.

Behnke then discussed the many ways that the university through its energetic dean, helps the school districts, e.g., through improving grant proposals and helping to secure outside evaluators. He also mentioned how undergraduate students are involved in the teacher center, e.g., with newsletter publication and various direct services to teachers. The dean helps to arrange for annual meetings of the superintendents, for other group sessions and activities, for research days, and for various social events. That some practitioners are invited to serve as adjunct professors is appreciated.

Behnke's final paragraph follows:

> Our partnerships are based on simplicity: They don't require lots of boards, meetings or committees. In most cases they are putting people in touch with each other. They are based on mutuality of purpose and need--and I see no reason why they won't continue to grow.

Dean Greene then described the planning and implementation of collaborative arrangements with a number of New York City high schools. She opened with the observation that certain structural arrangements work best, and leadership and commitment must come from the top, both at the school and at the university. Relationships have to be based on mutual respect and trust with open, clear, and

frequent communication. There must also be mutual benefit to all parties, and a common focus and mutual goals and clearly-defined responsibilities.

Then were mentioned a great variety of topics for which joint grants have been written, followed by references to the Public Education Advisory Committees that exist on all of the LIU campuses. These are composed of superintendents, central office personnel, principals, chairpersons of academic departments (all must be represented), and teachers. The committees set up annual goals for the schools of education and their partners. An effort is made to redesign both environments in the interest of better preparing school professionals, and to link the action-oriented environment of the school with the inquiry-oriented environment of the university. Examples of current partnerships were then provided, along with mention of conferences sponsored, linkages developed (e.g., with technology firms), blueprints created, and so forth.

California

The final segment of the symposium focused on a collaborative relationship between California State University Long Beach, and the Long Beach School District which with 60,000 students is the third largest in the state. Superintendent Guigni pointed out that there are in fact 52 projects on which the district and the university are now cooperating. He noted that the district also has collaborative projects with at least five other universities, all of which reflects the district's total effort to support empowerment.

One joint CSULB project is the California Academic Partnership Program for underrepresented minority eleventh grade students in two senior high schools. The project provides special academic help in English and Social Studies. Another is a new teacher project, one of 15 funded throughout the state, which grew out of applications by the teachers association, the teachers union, the school district, and the university. It provides specialized support to first-year teachers in conjunction with the state department's teacher credentialing program. It involves 300 new teachers a year.

Cities in Schools, funded by the private sector, which positions staff members to serve at-risk youngsters at the junior high school level and a college-bound partnership, started in 1988-89 to assist underrepresented minority students at several school levels to qualify for college are other examples. Other projects include a counselor-aide program in which selected graduate students serve (K-12) as aides to school counselors; a global education project; a high school tech project; a project that locates some older special education students on the university campus; two demonstration schools; Saturday Science for Kids; and

others. Why do these programs work? Guigni agrees with Dean Greene that they work because there is commitment from the top: the dean, the university, the deputy superintendent of the district, as well as the superintendent and the president of the school board. Also important is that there is a "Tripartite"--the university president, the school district superintendent, and the president of the community college--meeting on a regular basis to cooperatively review projects underway and to see what additional projects can be encouraged.

Dean Sikula then wrapped up the California segment, and the symposium as well, by drawing some generalizations from the literature. These were five:

1) There must be commitment, not only at the top, but throughout the entire university/public school system;

2) There must be mutual respect, trust, and the involvement of people, not just at the bottom but throughout the system. An example: universities should send their senior professors out into the schools, as one way to show the kind of respect the university has for the enterprise of educating people in the public schools;

3) We have to be flexible. Universities must be willing to give up some of the control they have had over teacher education;

4) Successful programs in some communities will not necessarily work in other kinds of settings. Programs that work are developed and implemented by the people who are most directly involved and affected. There has to be ownership. Avoid transplanting "canned" programs and expecting them to work; and

5) The setting of mutual goals, derived from public school people and people from institutions of higher education, is essential.

As a final comment: experimental programs must be given adequate resources, and must also be given time to work. There are no miracle solutions to the problems we have in education and in schooling today. Our efforts to change and improve things will require all forms of cooperation, and will not likely bear fruit quickly. So give each program time to work before you abandon it.

Selected Papers

Several of the conference presentations in this subtheme area have been selected for presentation here, because they pose a challenge to teacher educators to model the behaviors that must be practiced if collaboration is to become a reality in the broader context. The first selected paper "explores the habits of isolation that teacher educators bring with us from our previous lives as teachers, administrators, and students who have been part of typically individualistic and competitive K-12, undergraduate, and graduate schooling." Though exciting and desirable, collaboration is often forfeited in favor of "habits" as teachers react to the demands of the work day. The second paper reports on the variables involved in implementing a peer coaching system involving grade-level "triads" each including a veteran teacher, a less experienced teacher, and a novice. An interesting discovery is that weak leadership empowers: bottom-up ownership facilitates top-down administration when teachers are forced to take charge. The final selection analyzes three elements in building a common language and shared vision of collaboration as a way to overcome assumptions created from the traditional patterns of education.

Cooperation Starts Inside Schools of Education: Teacher Educators as Collaborators

John Fischetti
University of Louisville

Elizabeth Aaronsohn
Eastern Connecticut State University

Proponents of partnerships between schools and universities assume that students, teachers, and university faculty will benefit from associations that combine and enlarge the resources of both institutions. However, collaborative arrangements bring to the surface our unfamiliarity with cooperation, and the complexity of people working together.

This paper explores the habits of isolation that teacher educators bring with us from our previous lives as teachers, administrators, and students who have been part of typically individualistic and competitive K-12, undergraduate, and graduate schooling. The paper also addresses the lack of communication inside teacher education programs that isolates instructors, teaching assistants, supervisors, and cross-campus department advisors. Reckoning with these issues is crucial to successful work in collaborative partnerships. It is important that teacher educators address the stereotype of the "ivory tower" and the embarrassment of the ongoing references to a "mickey mouse" education curriculum. We need to

conduct honest dialogue about the tension between ourselves and school people, in which they see themselves as "in the trenches" or "in the real world," and see teacher educators inhabiting "fantasy land."

We come to this topic drawing upon our collective experiences as students, supervisors, administrators, and faculty in teacher education; utilizing research projects at the University of Massachusetts and the University of Louisville that are exploring cooperative learning; and from our mutual attempts to bring collaborative work and community to our own classrooms. We are concerned that in our own day-to-day interactions theory remains detached from practice (Dewey, 1965).

Teaching as We've Been Taught

Most of the literature on cooperative learning focusses on K-12 students, understanding that work in classrooms must be done to help those students unlearn previously internalized competitive and individualistic "instincts" so they can adjust to new, cooperative structures (Aaronsohn, 1988; Aronson, 1978; Holmes Group, 1986; Holt, 1984; Johnson & Johnson, 1982; Lortie, 1975; Oakes, 1985; Sarason, 1982; Slavin, 1983; Task Force on Teaching, 1986; Wittrock, 1986). These studies acknowledge the fact that traditional teaching actively discourages students from talking to one another, from problem solving with each other as resources, from making meaning interdependently (Brandes & Ginnis, 1986; Friere, 1982; Powell, Farrar, & Cohen, 1985). Almost all of the teachers in American public schools are successful products of that same kind of traditional teaching. Some of the literature on cooperative learning examines the deep initial reluctance of teachers, particularly secondary teachers, to try to use cooperative learning activities in their classrooms (Jackson, 1968; Stewart, 1986). Our research connects that reluctance with strong traditional habits of teacher-dominance and student isolation.

Some studies have focused on the isolation of K-12 teachers from each other in their buildings, described by Lortie (1975) as the "egg-carton" classroom. These studies propose that teachers must collaborate, for their own professional development and for the good of the children they teach.

Little of the research literature on either teacher isolation or cooperative learning in the K-12 classroom deals with the way teacher educators continue to perpetuate the notion that our role is to transmit yet another linear body of knowledge for which we alone are responsible. And, when alternative approaches are employed, they typically occur inside of our clique of colleagues, not within a framework of collaboration with other teacher educators or school teachers. Because alternative teaching methods are not widely seen or experienced, they are not usually part

of the discussion, and it is often collectively assumed that non-traditional methods that move the teacher away from the center of the classroom lack rigor, standards, or connections to K-12 classrooms. With this lack of mutual communication and respect we often hear others and ourselves saying or thinking, "What I am working on is significant. What you are working on must be less significant and not all that good." And the subjective nature of evaluating cooperative endeavors often discourages "counting" it as a significant portion of a grade-driven process. If we examine these reactions, it is easy to trace them to our own competitive, "win-lose" schooling.

Collaboration Requires Cooperation

Current collaborative efforts that require the linkage between faculty inside schools of education, cross-campus departments, school teachers/administrators, business partners, etc... bring to the surface our unfamiliarity with cooperation. Early meetings are often filled with misinterpretations, turf protection, and backbiting. The internal variables that operate to keep teachers at a safe distance from other teachers, and especially school people from university people, are ones we learned quite systematically in the hierarchical and competitive structures of our own traditional schooling. There, people who are now teachers and teacher educators were taught not to trust one another, not to see each other as resources, not to expect exciting ideas from each other. We have learned to mistake isolation for autonomy, and to identify talking to each other as cheating or wasting time. Creative teaming approaches and successful partnerships are exposing and contradicting the myth that cooperation is not possible or useful, but in too few and themselves isolated environments (Jones & Maloy, 1988). Without bringing these factors to full consciousness, the cycle of isolation and non-cooperation continues. Department members do not know what goes on in colleagues' courses, graduate students are employed but not empowered, or faculty meetings degenerate into administrivia or argument over rules or style without time or patience for substance.

Habits of Isolation in Teacher Education

Most of our habits of isolation in teacher education stem from our lifelong work as students and teachers. We learned well the competitive survival-of-the-fittest style that predominates education in this century. Teachers at all levels have little time or encouragement to plan together, to discuss current issues or trends outside of our professional organization's meetings, to talk together positively

about how students can be served. Lipsky (1980) discusses the "coping strategies" we each develop in isolation from one another and that reinforce our mistrust of each other. Most of our experiences in faculty meetings or committees is so frustrating that we often participate under psychological protest or not at all.

Scarcity of resources, especially new funds, has turned segments of schools of education against themselves in a competitive fight for survival. This institutional mechanism of infighting is often willingly and unwillingly allowed to occur by administrators as a way to deflect animosity. This practice creates personal tensions over issues that would not take place in times of growth. For example, overworked secondary teacher education programs are forced to compete with overworked elementary programs for shrinking funds. At the same time, faculty are being asked to work with school and business colleagues to develop partnerships to improve schools and teacher education. These new initiatives take nurturing, time, and enormous amounts of energy to plan, design, and implement, yet a large portion of that time and energy must be spent in internal bickering over priorities, justifying the new partnerships through the committee processes, lobbying for teaching assistants, begging for travel reimbursements, etc... The infighting that takes place over the small details and large rationales for the new initiatives can stymie the positive energy that exists to try new ventures.

A large part of the failure of cooperation inside schools of education relates to communication. Just as most teachers in schools know little about what takes place in their neighbors' classrooms, education faculty spend little time working together to synchronize their courses, integrate the important feedback of their cadre of graduate students, or reporting on teaching practices that are successful or not. This behavior mimics our behavior as teachers in schools but contradicts both our intuitive desires and research findings.

Our unwillingness to attempt cooperation in the classroom allows us to fail a majority of students by teaching only what we feel comfortable trying, which is usually how we were taught. Higher education's lecture oriented, "take a number" style perpetuates the norm of teachers as expert, "top-down," "don't-ask-questions-or-they'll-slow-us-down" attitude. And teacher educators who try new ideas regularly have not successfully communicated or have not been asked to contribute their emphasis of learning and teaching or of facilitating instead of lecturing. By keeping a safe distance from one another, the input of junior faculty, graduate students, and participating teachers can receive only lip-service in teacher education program evaluations and reform. Without an effort to thoughtfully reflect upon the complex and appropriately inefficient nature of teacher education, we continue to perpetuate the trend to perceive education courses as less academic than subject area department offerings.

Accepting Multiple Realities

Working together toward improving schools is not only the trendy topic of this reform era. It is an exciting, ambiguous way to blend resources and create unanticipated positive outcomes that can improve opportunities for all students. Cooperation does not mean relinquishing the vital roles of professional schools of education. In fact, it calls for a simultaneous colleague and critic responsibility that honors the work of schools from an informed perspective, but challenges them to move forward to better meet the needs of students now not reaching their potential. This responsibility of teacher educators requires better cooperation from within starts by accepting and understanding the multiple realities that exist in any organization (Jones & Maloy, 1988; Schutz, 1967).

Ideas for Working Together

Teachers and teacher educators often see the opportunities to work together as more work rather than the possibility of different work. Our research has shown us that when we suggest to practicing teachers that they organize students into cooperative groups, it does not occur to them that they can then be "free" from the traditional lesson planning process of lecture and factual regurgitation tests. Similarly, teacher educators may feel that collaboration is adding on to the tasks they already have taken on. We may think that 5 + 1 = 7 when it is very possible that by knowing more about each other's work, 5 + 1 = 5. It is our previous experience in unsuccessful groups and our successful training in individualistic style that continues the predominance of individual rather than team efforts.

We ask teacher educators to engage in collective discussion about the difficulties of overcoming the habits that impede our working together, and the resulting fragmentation that of much of what we do in teacher education programs. Strategies that we propose for improving internal cooperation require three elements that draw about the work of Sarason (1982):

1) Faculty have to want to work together. Those that don't cannot "jam" those that do. In some cases, senior faculty or administrators have been allowed to create an institutional isolation standard that is not appropriate for teacher education in the 1990s.

2) Faculty have to be willing to be flexible about uncertain and ambiguous linkages that may challenge old ways of doing things, not just use them to confirm what we already believe.

3) Administrators have to create a cooperative environment, rewarding those who cooperate with recognition and resources to carry out new program ideas.

Extended retreats have been used as a way to air views about program improvement in the time and space to share views thoughtfully. Large amounts of energy gets created during these special events that has difficulty being infused into the culture after the retreat spirit is lost in the day-to-day of the semester. More permanent processing meetings must take place as a regular part of the schedule. Even those of us that have been part of such regular efforts to share our work regularly feel frustrated that we spend too much time talking, leaving not enough time to "do it." Yet, without regular, revolving small group meetings to share our work, the context is lost and then we too tend to fall back on curriculum-to-be-covered, teacher-dominated curriculum. Our university advantage is that we are supposed to take time to reflect and work together. Perhaps our previous experience in such forums again blocks our ability to conceive a positive situation where we can share in a small enough forum to be heard, but with a different enough mix of people that we are not just talking to the people we already know agree with us.

The Cincinnati Bengals of the National Football League floundered a year ago. This summer, in training camp, the coach mixed things up: changing old roommates, putting new players with veterans, Blacks with Whites, offense with defense. He broke the old norms in an effort to get people to know one another. Cooperation as a team was what he believed was the difference between a winning season and another mediocre one. The talent on the team was championship caliber. Now they had to work together. Players balked at first at the reshaping of their hamster-like norms but now admit their Super Bowl season turned as they began to know one another better and respected each other's work more. Much of our lack of cooperation stems from our White male-dominant higher education culture. We might learn from this example of another male-dominant world in the NFL, reorganizing the people emphasis of our work to center on getting to know each other and utilizing our differences in style and substance as strengths rather than levers for division and ongoing "sameness" in what we do.

We can learn to negotiate inevitable differences of perspective rather than avoiding them by distancing from each other. What we propose for teacher educators is the modeling of cooperation within our teacher education programs that must be part of all our collaborative efforts.

References

Aaronsohn, E. (1988). *The process is the content.* Unpublished comprehensive examination paper, University of Massachusetts at Amherst.

Aronson, E. (1978). *The jigsaw classroom.* Beverly Hills: Sage Publications.

Brandes, D. & Ginnis, P. (1986). *A guide to student-centered learning.* Oxford: Basil Blackwell.

Dewey, J. (1965). The relation of theory to practice in education. In M.L. Borrowman (Ed.), *Teacher Education in America: A documentary history* (pp.140-171). New York: Teachers College Press, Columbia University. [1904]

Fischetti, J. (1986). *Asking school people: How secondary teachers and administrators view recommendations of national school reports.* Doctoral dissertation, University of Massachusetts at Amherst.

Freire, P. (1982). *Pedagogy of the oppressed.* New York: Continuum.

Holmes Group. (1986). *Tomorrow's teachers.* East Lansing, MI: Holmes Group.

Holt, J. (1983). *How children learn.* New York: Dell.

Johnson, D., & Johnson, F. (1982). *Joining together: Group theory and group skills.* Englewood Cliffs, NJ: Prentice-Hall.

Jones, B., & Maloy, R. (1988). *Partnerships for improving schools.* New York: Greenwood.

Jackson, P. (1968). *Life in classrooms.* New York: Holt, Rinehart, and Winston.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services.* New York: Basic Books.

Lortie, D.C. (1975). *Schoolteacher: A sociological study.* Chicago: The University of Chicago.

Oakes, J. (1985). *Keeping track: How schools structure inequality.* New Haven: Yale University.

Powell, A., Farrar, E., & Cohen, D. (1985). *The shopping mall high school: Winners and losers in the educational marketplace.* Boston: Houghton-Mifflin.

Sarason, S. (1982). *The culture of the school and the problem of change.* Boston: Allyn and Bacon.

Schutz, A. (1967). *The phenomenology of the social world.* Chicago: Northwestern University.

Slavin, R. (1983). *Cooperative learning.* New York: Longman.

Stewart, D. (1986). ERIC resources on teacher education. *Journal of Teacher Education. 37*(3), 35-37.

Task Force on Teaching as a Profession. (1986). *A nation prepared: Teachers for the 21st century.* New York: Carnegie Forum on Education and the Economy.

Wittrock, M (Ed.). (1986). *Handbook of research on teaching* (3rd ed.). New York: Macmillan.

The Collaborative Consultation Support System: C.S.D. #24's Peer Coaching Project

John B. Poster
Pace University

In 1986, Mr. John Iorio, the superintendent of a Queens, New York elementary school district, decided to install a teacher training program based on peer coaching in one of his district schools. The New York City school system had adopted a mentor teacher model in which senior teachers served as advisors to probationary instructors. Iorio, who had been a teacher for 13 years, believed that all teachers, junior and senior, were isolated and in need of collegial support. The peer coaching plan he designed joined three teachers on a grade level in a mutually supportive "triad." He reasoned that three teachers would be preferable to two since the third member could buffer personality conflicts which developed and the novice in the triad would observe differences in teaching style and techniques. Ideally, each triad would be composed of a veteran teacher, a less experienced one, and a novice. All would be volunteers. (In practice, the novices were assigned to the program since they were appointed to the district within days of the school year's start.) A number of district principals asked that the peer coaching program be placed in their schools. Iorio chose P.S. 19, an old school with 1,700 students and 74 teachers. P.S. 19 was a Chapter One school which would experience an influx of new teachers in the next few years.

Context Variables

Opposition to the superintendent's peer coaching model was voiced by the teacher's union, which objected to the "top down" conception of the project. Citing views such as Boyd's (1987) criticizing innovations which were not "owned" at the local level, the union's representatives favored the mentor teacher program which it had helped to develop. The administrator's union favored the coaching plan, apparently because it was less threatening to supervisors.

These difficulties were overcome partly because the schools' chancellor favored the project and was willing to put $100,000 of discretionary funds into it; the volunteer nature of the project was reaffirmed, and a university professor not affiliated with either the union or the school system was named director. The director was really a consultant who helped to design training experiences and suggested changes in program design. In practice, the superintendent was the program director.

The price of the chancellor's support was a demand that the project be evaluated in terms of participants' views and student test scores in reading and

mathematics. The inclusion of test scores appeared premature to the planners since, during its inaugural year, the project would involve 18 out of 74 teachers in the school (one triad per grade level, K-6), but the pressure to justify all innovations through expected gains in basic skills was unrelenting. Subsequently, test scores improved on average, but it is impossible to separate the effect of the coaching program from the Chapter One program, and other unrelated changes in the school.

The triad teachers found the initial training confusing. Their view of classroom visits was the traditional one where supervisors observed teachers, wrote up a summary of the observations, and judged the teachers' efficiency. Only by stressing the divorce of peer coaching from supervisory evaluation could the consultants convey the essence of the collegial approach they sought. An important understanding was that all teacher interactions should be information exchanges. This avoidance of hierarchy and seniority was somehow suspect to the teachers. Seniority was one of the few badges of rank in a flat progression; ignoring it brought the school's status system into question.

The school district's and the chancellor's discretionary funds went, for the most part, to hire substitutes. Each teacher had one free period (known as a preparation period) in the school day, not including lunch. The triad teachers were not paid for participating in the program, but did receive an extra preparation period in which they could observe one another, meet to discuss professional matters, or attend training sessions in the school. During these additional periods substitute teachers took over the triad teachers' classes.

Once the school year began, problems emerged. Triad teachers had to have schedules which included common preparation periods for easy access to each other. This scheduling was not easy to accomplish. The district discovered that substitutes for the coaches were not always available. The school administrators were not sure to what extent they were to help the teachers define their new roles and provide assistance, a problem cited by Joyce and Showers (1988). The director refused to schedule consultants unless the teachers defined the services they wanted and rated each consultant's efficacy. The teachers found this demand that they take charge dismaying. Teacher requests for services had to be routed through the principal's office and the principal then had to find time and space for teachers to attend training sessions. Peer coaching increased rather than reduced the principal's workload.

By the second semester, the coaches' requests for services had undergone an important change; the triad teachers asked for consultants who could address specific curricular or pedagogic issues rather than the essentials of peer coaching. Consultants had been coming to the school regularly, but now their task was to

comment on overcoming a too rigid teaching curriculum or the new orthodoxy of hand held calculators in mathematics education. The teachers had invented their version of peer coaching and needed to respond to the needs of their clients. Consultants and staff developers adapted to the principal's scheduling difficulties. They came to the school in the morning and stayed all day talking to successive waves of teachers, usually three to six at a time, during the teachers' 45-minute preparation period.

Conclusions

The Collaborative Consultation Support System has survived. In the 1988-89 school year there were two triads on each grade level in the target school. Veterans of the past year will continue as part of each triad and new teachers will be added. All the 1987-88 participants volunteered for the next cycle. There will be one change. The teachers voiced concern that they were away from their classes too many minutes each day. They didn't want the extra preparation period. Participants will find new ways to make time for coaching. Collaboration has bred professionalism.

What has been learned since 1987? Researchers tend to make familiar tasks formidable. The literature abounds with prescriptions as to what teachers should know before attempting peer coaching. If teachers learned all that they are advised to learn, they would never finish studying and begin coaching. Adults help each other all the time. For peer coaching to work, experienced teachers have to do more unlearning than learning.

Teachers have learned district supervisory practices. When one teacher visits another's classroom, the visitor lapses into quasi supervisory behavior. The observed teachers exhibit the defensive behavior usually associated with criticism from supervisors. Much of the initial training was devoted to "deprogramming" the teachers. One serendipitous occurrence was that the peer coaches had no responsibility for rating new teachers or determining tenure status. Although the teachers' union would have preferred a more active role, the fact that teachers had no supervisory function made it easier to differentiate peer coaching from supervision.

The director posited a model of peer observation based on invitations. One of the triad teachers would invite the other two to visit her classroom and comment on one phenomenon. Only one topic could be broached at each observation. No lesson plans or other descriptive material was to be circulated. The observers were to arrive without paper, pencils, checklists, or other paraphernalia. After the lesson the observers were to comment on the agreed topic such as how to ask questions which would inspire critical thinking. If the observed teacher had

difficulty translating the comments into practice, the two teachers invited her to their classrooms where they modeled the behavior in question. If the veteran teachers thought that the novice was not asking the right questions or was afraid to admit deficiencies in an area such as classroom management, they asked the novice for suggestions on their own classroom management during her observations of their classes. Unsolicited advice was never to be offered. If solicited advice was ignored, the advisor was to remember that there were many paths to glory.

A second thing we've learned is that teachers should be weaned from adoration of seniority. In the triads, the initial assumption of participants was that all of the resources would be devoted to the tyro. When the trainers argued that the new teachers could help their more senior colleagues by contributing information on a myriad of subjects such as photography, nursing, foreign travel, and so forth, the veterans refused to "hear" the message. A teacher of 20 years of experience could only be aided by an instructor with 21 years of service. When new teachers observed the senior triad teachers' classes, they were encouraged to make suggestions based on their life experience which might enrich the class. The faculty has become more open-minded about novices' suggestions, but additional progress is necessary.

A corollary of our lesson on seniority is that not all triads work equally well and that the seniority of the veteran members of the triad is not a predictor of triad success. Energy level and persistence are important characteristics of the senior teachers if the triad is to work. The triads spent more time in discussing curriculum, pedagogy, and testing than in mutual observations. They reported these discussions as the most beneficial aspect of the experience. Joining three teachers at each grade level, as opposed to two, seemed to make the conversations more worthwhile. A promising practice would be to reconstitute triads each year if more than one exists on a grade level in a school. In this way novice teachers who spent a year with less energetic veterans will have a new experience with more ambitious colleagues, and probationary teachers who had a satisfactory introductory year will spur their second year colleagues to match their first year experiences.

Finally, our experience has taught us the benefits of weak leadership. Interestingly, theorists don't seem to have grasped the point that a strong administrator is less likely to empower teachers than a weak one. In our case, top-down leadership was acceptable if, in its wake, bottom-up ownership arose. Because of the context variables mentioned, the superintendent went outside the school system to enlist a university professor as a part-time director of the peer coaching

program. This was fortunate since an attempt to interject a forceful district employee into a milieu which included a strong superintendent and principal, as well as a wary teachers union, would have been disastrous. The professor, the author of this paper, visited the school, talked to all the triad members, commiserated with the administrators on their lot in life, requested consultants, and, in general, answered questions with "I don't know; what do you want to do?" As the peer coaching program continues, the director, with any luck, will get even weaker.

References

Boyd, W. L. (1987). Public education's last hurrah? Schizophrenia, amnesia, and ignorance in school politics. *Educational Evaluation and Policy Analysis, 9*(2), 85-100.

Joyce, B., & Showers, B. (1988). *Student achievement through staff development.* New York: Longman.

School-University Collaboration: Do We Share a Common Language and Vision?

Judith A. Ponticell
University of Illinois at Chicago

"Partnership" and "collaboration" describe a wide variety of relationships among schools and universities. It is often assumed that both share the same desire to improve schools for children and the same understandings of ways to engage in educational problem solving to the benefit of both collaborative partners.

Assuming that common reasons for collaboration are shared, as well as common understandings of what "collaboration" is, can cause problems. If each partner believes its conceptions of collaborative work are valued and that the other partner is using the same conceptions in the same ways, schools and universities remain unaware that they have very different agendas and expectations (Maloy, 1985).

If collaborative efforts overlook what may be "diametrically opposed" visions of the dimensions of collaboration (Metzner, 1970), collaborative partnerships are at the mercy of powerful, conservative forces in school and university cultures (Oakes, Hare, & Sirotnik, 1986). Building a common language and shared vision may be as important for the success of collaborative relationships as building a structure for collaboration.

The Chicago Area School Effectiveness Council (CASEC) is a school improvement consortium at the University of Illinois at Chicago College of Education and is a vehicle for collaboration among public schools and school districts, private, and parochial schools in six Illinois counties in the Chicago metropolitan area. Currently, 800 schools and school districts are members of CASEC.

A questionnaire to determine members' understandings of collaboration was sent to random samples of 200 CASEC members from 1987-89. Of the 600 questionnaires sent, 325 were completed. Responses suggested three issues underlying the development of a common language and shared vision of collaboration: 1) defining "collaboration," 2) defining collaborative roles, and 3) learning to trust collaboration.

Defining "Collaboration"

Collaboration was defined as a partnership, characterized by mutual or reciprocal benefit. The most important characteristics of successful collaborations were 1) shared, reciprocal benefit, 2) shared leadership/decision making, 3) trust, 4) acceptance of each other's knowledge/experience, 5) common situation/experience, and 6) common goals.

John Goodlad (1988) suggested that too frequently institutional representatives get caught up in managing the "enterprise" of collaboration, so that "substance may be ignored in the elaboration of form." Ann Lieberman (1988) described four

myths that often keep collaborative relationships among schools and universities from ever getting started. These are a need for clear goals, a set of carefully planned activities, an agreement about the structure of the collaboration, and a solid administrative structure, along with a permanent group of people.

Studies (Maloy, 1985; DeBevoise, 1986; Lieberman, 1986) have suggested that strong administrative support removes bureaucratic stumbling blocks, provides resources, and recognizes collaborative efforts. But, the responses to this questionnaire indicate a strong commitment to mutuality of benefit, functioning partnership, trust, and commonality of experience are most important signs that participation in a collaborative relationship is taken seriously.

Defining Collaborative Roles

Collaborative relationships can be very tenuous arrangements. For many school practitioners, their "collaborative" experiences with universities have been limited to serving as field sites for teacher education placements, receiving one shot, "quick fix" inservice workshops from university consultants, or being studied by university researchers.

Furthermore, the isolation of school practitioners from other school practitioners is an expected "given" in the culture of schooling (Lieberman & Miller, 1984). As one respondent eloquently wrote, "Collaboration may be a norm of work in universities, but schools are not structured to facilitate a collaborative model. Collaboration is not the norm school to university, district to district, school to school; it is also not the norm teacher to teacher within a single school."

Respondents characterized the university 's role as providing information, conducting research, providing inservice training, and evaluating school programs. The role of the school was characterized as learning about successful school programs, helping with teacher education, requesting help from university faculty, serving as research sites, and keeping up with the educational field.

Despite respondents' characterization of collaboration as mutuality of benefit, functioning partnership, trust, and commonality of experience, the norms and attitudes of the school and university cultures create role distinctions that do not support this vision of collaboration.

The university is clearly seen as knowledge-holder and knowledge-transmitter, while school is seen as receiver of knowledge. The information "brokering role" that the university often takes in school/university collaboration (i.e., facilitating/coordinating to provide formats for school people to connect to the work of the university or to listen to presenters from other schools), only serves to perpetuate the knowledge-holder role (DeBevoise, 1986; Lieberman, 1986).

Learning to Trust Collaboration

The traditional school and university barriers that provide a formidable obstacle to "real" partnership are not easily broken. Collaboration requires a considerable amount of risk on the part of the participants.

Traditionally, school "practitioners" have been peripheral to research. They have been the subjects of research or contextual variables to be considered in designing and/or interpreting research. Oakes, Hare, and Sirotnik (1986) suggest that when practitioners become central to research problems and when the school context becomes the context for collaboration, knowledge can be generated from practice, as well as from theory, and can inform both practice and theory.

Questionnaire respondents identified the most important sources of knowledge for school improvement as 1) knowledge generated through programs that had successfully connected the theoretical to the practical world and 2) knowledge generated by research.

However, the traditional pattern of "quick fix" inservice workshops to which school practitioners are accustomed is not enough. These "pep talks," as several respondents labeled them, are not as useful as strategies for planning, implementation, monitoring, evaluation, and follow-up of the impact on schools of changing school policies and programs.

Respondents made it clear that knowledge generated by school practitioners learning from other school practitioners was as valuable as knowledge generated by university research. Respondents also indicated that school practitioners need to know more about how to conduct research in their own school settings.

Oakes, Hare, and Sirotnik (1986) found that collaborations that fail to include school practitioners in any but a consuming role "court disaster." But, moving toward trust in collaboration requires an understanding of the separate agendas and orientations of both schools and universities .

These separate agendas are products of the cultures of schools and universities. Respondents indicated that the factor contributing most to the failure of "real" collaborative partnerships was TIME. One respondent commented, "Time for inquiry and research and thinking are structured into the job descriptions of professors. Teachers and administrators who want to do inquiry or research or who simply want to THINK about how to create effective schools work in systems that consider these activities as extracurricular."

As Hord (1988) suggests, change and improvement are not accomplished quickly. Responses strongly indicated that time differences in school and university cultures strain participants' trust in the workability of collaboration. The "very different time clocks" in the cultures of schools and universities (Lieberman, 1988) present a formidable barrier to real collaborative partnerships.

Summary

Successful collaborative relationships build a common language and shared vision of collaboration. Although the structure of a collaboration can make specific provisions for exchange of knowledge and practice, the different (and often very separate) worlds of schools and universities require making explicit our understandings of collaboration.

Speaking a shared language of collaboration helps to break down traditional barriers. A shared language is based very much upon individual perceptions of the reality of the "rhetoric" of mutual and reciprocal benefit or shared leadership.

Making collaboration "real" is inhibited by knowledge-holding and knowledge-receiving roles. The creation of norms and attitudes that value and model a knowledge base generated within schools, as well as within universities, is more important than the structure of the collaborative relationship.

Collaborative efforts are inhibited not so much by opposing views as opposing cultures. Differences in both perceptions and realities of time and change, for example, create contexts for collaboration frequently in conflict with what might be very strong shared beliefs about improving education.

Whatever vision is created within a collaborative relationship, it must be adaptive and evolving. And, the partners in that vision must be comfortable with risk and tensions as new meanings and shared values emerge.

References

DeBevoise, W. (1986). Collaboration: Some principles of bridgework. *Educational Leadership, 43*(5), 9-12.

Goodlad, J. I. (1988). School-university partnerships: a social experiment. *Kappa Delta Pi Record, 24*(3), 77-80.

Hord, S. M. (1988). The principal as teacher educator. *Journal of Teacher Education, 39*(3), 8-12.

Lieberman, A. & Miller, L. (1984). *Teachers, their world, and their work.* Alexandria, VA: ASCD.

Lieberman, A. (1986). Collaborative work. *Educational Leadership, 43*(5), 4-8.

Lieberman, A. (1988). *An address to the Holmes Group Annual Conference.* (January 29-30, 1988).

Maloy, R. W. (1985). The multiple realities of school-university collaboration. *Educational Forum, 49*(3), 341-350.

Metzner, S. (1970). School-university partnerships: a tale of dichotomous desires. *Phi Delta Kappan, 51*(6), 328-329.

Oakes, J., Hare, S. E., & Sirotnik, K. A. (1986). Collaborative inquiry: a congenial paradigm in a cantankerous world. *Teachers College Record, 87*(4), 545-561.

Summary

The role definitions, attitudes and mindsets, skills, experiences, and motivations that are possessed by most classroom teachers and other categories of educators derive from a century or more during which role isolation was the norm and collaboration between individuals and their various membership groups was extremely limited. In the dramatic shift toward partnerships that is now underway, old habits and new expectations create confusion within what some observers are calling a "clash of cultures." Dealing with the stresses and the problems that arise as the very context of educational work is rapidly shifting is a challenge that is being met with varying success. In the presentations and discussions that comprised this section of the AACTE program, the contextual variables were significantly clarified and some heartening successes were identified along with some sobering realities.

It seems significant that many of the presenters apparently had early co-involvement with others. For example, Bill Honig's grateful references to his Teacher Corps days illustrate the point that experiences with interchange and collaboration produce a more open, communicative, motivated professional. It also seems significant that shared values, shared objectives and visions, shared decision making, and a shared language were mentioned so frequently as essential to the success of collaborative efforts.

The potential partners in improving teacher education are many, and include parents, community organizations, industry, and governing agencies. Within the ranks of educators, intra-university collaboration is seen as a critical prerequisite to interfacing productively with workers in the schools. The symposium provided many exciting and encouraging examples of school/university alliances, and generated an excellent list of the conditions that must exist if the alliances are to prosper. One key idea is that all of the individuals and groups need to model cooperation at its best, and related to it is the optimistic conclusion that given mutuality of purpose, of need, and of trustful respect, significant accomplishment is possible.

Chapter Five
Model Programs

Henrietta S. Schwartz, John J. Lynch, and Thomas Carson, editors*

It should not be surprising that Model Programs constituted a major part of the 1989 AACTE Annual Conference--nearly five times the average number of presentations were classified under this theme--given the historic importance placed on such collaborations. Establishing more extensive partnerships with business, parent, and community groups was a central recommendation of the National Commission on Excellence in Education report, *A Nation at Risk*, published in 1983, as well as the theme of the 1983-84 school year, "National Year of Partnership in Education," as proclaimed by former president Ronald Reagan. Six years later, the solutions to the crisis in American education that these programs represent are due for evaluation, and their lessons aired.

Interactive communication works is easily the main message drawn from these programs. The action generated by joint involvement between different actors from differing communities seems to succeed where prescriptive methods often fail. Albert Shanker, President of the American Federation of Teachers, claims that this is so because the fundamental analogy of education--that students learn by being taught--is wrong. His own model of collaborative educational program is presented in the featured speech that initiates this chapter. A brief survey of the scope and nature of the presentations made at the 1989 AACTE Annual Conference seems to support his claim that collaboration is among the remedies to our nation's educational problems. A brief description of each category follows.

Private sector collaboration is well represented among the 1989 model programs presentations. These programs grow from business concerns over the future competitive ability of the US in a shrinking global economy. Business, labor, and community partnerships seek to improve education and as well as both the

---

* *Henrietta Schwartz is the Dean of the School of Education and Professor of Administration at San Francisco State University. Her lengthy publication, research, and presentation record crosses a variety of disciplines from multicultural education and equity to ethnography and cultural pluralism as well as teacher and administrator stress. Dr. Schwartz chaired this year's 1989 AACTE Annual Meeting Committee, and is the general editor for this publication. John J. Lynch is Professor of Education and Associate Dean, School of Education, San Francisco State University. He has been involved in a variety of university/school collaborations over the past 30 years and is currently the director of the Institute for the School Improvement Process. Thomas Carson is finishing his Masters Degree in Interdisciplinary Social Science at San Francisco State University.*

competitiveness of American products in world markets and the ability of American workers to be an effective and highly skilled labor force in an era of rapidly increasing technology. Such concerns are manifested in two major ways. The Adopt-a-School approach, for one, unites the volunteered resources of private and public individuals and institutions with needing school sites. The partnership helps to alleviate the burdens placed on educational facilities by declining resources. Another manifestation of private-sector collaboration is targeted to at-risk students because business concern with the future threat of not adequately preparing minority students for their increasing role in tomorrow's labor force.

As true in any real collaboration, businesses gain from these partnerships as well. Productivity increases due to advancing skills of the labor force is mentioned above. Programs like the Chevron Encore Project, presented at the annual conference, provide the vehicle by which retiring private-sector employees can make a career transition while filling the need for science and mathematics instructors. The Aerospace Scientists and Engineers Program is featured in this chapter as an example of private sector collaboration.

The movement toward advanced technologies in education is another theme of collaborative projects, and was reflected at the annual conference. Using computers to promote good teaching practices is pursued as a remedy to break the isolation of classrooms, as well as a way to enhance the ability of educators to remain consistent with the overall goals of education. Models of two of these programs were presented at the conference. The development and implementation of a common data-base for following up preservice teacher education programs was presented by faculty from the College of Education at both Michigan State University and Ohio State University. This database includes employment history and characteristics with data concerning the adequacy of various skill training and background information as a way of following up on geographically dispersed graduates. This presentation is featured in this section.

Inter-university collaborative efforts were presented as well. One such presentation reported on a consortium put together by the Southern Education Foundation involving six historically Black colleges in the south and three graduate schools of education. Another presentation was made on a program between the University of Wisconsin-Whitewater and three two-year institutions. They attempted to increase racial and/or ethnic minority recruitment through communicating the admissions and completion requirements of professional educational programs with minority students at the two-year institution.

Cultural exchange through education is also a significant arena for collaboration as evidenced by several models presented at the conference. One program at Iowa's Warthing College aims at preparing teacher graduates by placing interns

in culturally and ethnically diverse settings, like East Harlem, as part of their training. Another program in Virginia seeks to increase global understanding through "community teams" that share knowledge about East Asia. A direct international collaboration, the only one presented at the conference, involved an elementary, secondary, and university three-tiered program between Indiana University of Pennsylvania and Nigeria.

The largest category of model programs presented at the 1989 AACTE Annual Conference involved university/school/school district joint efforts. Nearly 50 of the 70 presentations offered under this theme concerned these partnerships. These programs span the nation and are seen as a direct solution to problems in education--the educational system reforming itself through a closer working relationship and articulation of needs and expectations of the two educational communities. In such successful partnerships, both schools and colleges actively determine the goals and activities, as well as jointly contribute and derive benefits from collaboration.

These partnerships generally take two tracks, though they often combine several features. One approach is to improve education by educating the teachers themselves. This faculty development approach is represented by such programs as the high school-college research projects. The Teacher on Sabbatical program and the Teacher Recruitment and Internship Project in Atlanta are examples of school/university/school district partnerships that focus on teacher development.

School/university collaboration also attends to the form of the at-risk programs. These efforts focus on the educational needs of minority, or at-risk students, those often inadequately educated. Examples of these projects include the College Readiness Program jointly administered by the California State Department of Education and the California State University, which provides academic help and motivation for middle school students; the Colorado Partnership for Education Renewal; and the Urban Scholars program, which offers college scholarships to minority students.

Given the expanse of programs concerned with university/school collaboration, it is fitting that the featured symposium presented in this chapter concerns three such partnerships. Ann Lieberman describes the complex Puget Sound Consortium involving 14 school districts and the University of Washington and poses critical research questions generated by collaboration. Rhonda Weinstein looks in depth at a collaborative program involving one high school and the University of California at Berkeley while Sidney Trubowitz describes a seven-year effort between Queens College of CCNYU and a middle school in the inner city. Their insights and provocative analysis point to the need for time, hard work, commitment, and expertise in any joint venture.

Remarks of the Major Speaker

This chapter opens with a summary of the dynamic and challenging address delivered to the participants by Albert Shanker, President of the American Federation of Teachers. Once again, Mr. Shanker fulfills his role as a major education statesman calling on deans, faculty, and school leaders to combine efforts to reform schools and teacher preparation.

Collaboration: Process, Substance, and Humility

Albert Shanker

We meet today at a time of unprecedented danger to American public education. No small part of that danger is the fact that most people active in the field of public education are quite unaware of what the dangers are . . . At the present time, the states of Minnesota and Iowa have tax deduction schemes which are increasing as the years go by. We have a United States Supreme Court which is (unlikely) to continue the view that aid to nonpublic schools is unconstitutional. Tax credits continue to be an issue in Iowa. But, I think we've got to worry more and more that tax credits will be considered an issue at the state and local levels rather than at the federal level. Wisconsin has a governor strongly considering a voucher system which will include both public and nonpublic schools, and the State of Minnesota is about to consider and probably pass a voucher scheme which will include nonpublic schools for at-risk students and for drop-outs.

Choice is on the agenda in a majority of states in this country. I'm not saying that we should be against choice, but that it is a rather clear message that governors and legislators are saying that there are large numbers of unhappy and dissatisfied parents . . . and they're going to give them the right to take their kids and move them to some other district in the state. There are substantial moves across the country to revise, eliminate, or lift regulations to open up (administration and supervision) so that there could be lateral movements from people in management and business . . . If you look at a whole list of things like this, you've got a picture that the world out there is very, very unhappy with what's going on. This isn't going to go away (for) it is a permanent part of the feelings and attitudes of the American people.

There's something around the corner or in the wings waiting for us which we haven't seen yet, but it's there. In Great Britain the Thatcher government passed a school reform bill which went into effect last September . . . In Denver, Colorado, about eight months ago, the Republican governors met . . . and seven or eight of them talked about how the Thatcher school reform should be on the Republican Party agenda for education in the United States. The Thatcher plan is as follows: If 30% of the parents in any school sign a petition saying that they're unhappy with the way the school's being run, then all parents must receive a secret ballot in

which they vote on this question--Do you wish to take your school out from under the jurisdiction of the board of education? If a majority of those voting in this secret ballot say yes, that building is removed from the jurisdiction of the board of education and the parents then elect a committee to run their board.

In order to make sure that the quality is maintained, Great Britain has set up committees in mathematics, science, elementary, English, and in other fields and established a national curriculum so that semester by semester and year by year there's a defined curriculum as to what all students in Great Britain are to learn. To make sure that the schools do it, there's a system of national examinations so that each year parents will know to what extent their kids have learned what they're supposed to learn. If they don't like what their board of ed has done, or if they don't like what their parents who are running their school have done, they can oust them.

It's easy to stand up and argue about what's wrong with each of these things. However, when parents and citizens are basically unhappy with the education that the schools are delivering, negative arguments about what potential change might bring will not be enough . . . I think we need to ask whether what is happening to the public in this country is some kind of hysteria that's created by the media and the press, or is there some reality, some real basis for their dissatification? I'm sorry to say this, but I think that they're basically right.

The results that we've had over the years from the National Assessment of Educational Progress (tell us that) the percentage of kids who can write what NAEP considers an acceptable letter . . . is 20%. The percentage who can write what you and I would consider a decent letter is 5% . . . The percentage who can look at a railroad or bus schedule and figure out which train or bus to take in order to get someplace by a given time is (nearly 5%). If you take all minorities out of that, it's (nearly 6%) for whites. On each and every indicator . . . only 5% are really leaving our schools able to function on what we used to consider, and what Europeans still consider, a college or university level. Five percent.

Now, this is disastrous news. When you look at the math-science results at the age of 13, the United States is at the bottom . . . Why is this happening? It essentially means that we can't make minor changes . . . (and) we are so far away from where we need to be that (even) minor changes won't work . . . Did God only make 5% of us smart enough to read a bus schedule? I don't believe it and neither do you. So we have to ask ourselves what's wrong. And what is wrong is that the fundamental analogy on which schools are based is wrong . . . It's only the effort of the individual, each individual student, that ends up resulting in learning and in education being successful. We can't teach anybody anything. We can help. We are midwives. Therefore, what we need is essentially a system which is based on the participation and activity of students.

If the student is a worker, let's talk about what kind of a workplace a classroom is . . . Well, it's not like an auto factory, or garment factory, or coal mine. It's not like working in the merchant marine. A school classroom is most like an office. In an office you read (and) write reports; you listen to (and) give all reports and you manipulate words and numbers . . . Imagine organizing an office the way we organize a school. I come in to work the first day and I'm told, "Al, this is your desk. Around you are 25 other workers who are doing exactly the same work but you are never to talk to them and they are never to talk to you. And, see that, she's your supervisor; she will tell you what to do and you will immediately get to work doing it. In 45 minutes a bell will ring and you will get up and move to a different office where you will be given totally different work to do . . . Every 45 minutes you will have another 25 people not to talk to, another boss, and different work to do.

How many of you organize your offices that way? Nobody. Why not? Well, because in an office if you go over to somebody and he's done the work wrong, the first thing you ask him is, "Al, didn't you check this with anybody sitting next to you?"

The fundamental analogy is . . . what's wrong. We require kids to do something that most people can't do: sit still for five or six hours a day. If I were to take my kids at home and say, "Sit there for five hours and I'm going to stand here and talk to you," somebody would come to pick me up from society for the prevention of cruelty to children. But if we do it in school and the kid moves, we move the kid away and say, "You're special education, you're disturbed, you can't sit still."

Now, how are our schools organized? First of all, we take kids in the whole year at a time, which means in the first grade the oldest kid is a year older than the youngest kid. I've never met a kid in the first grade who came up to me and said, "Well, I'm not doing as well as he is because I'm a year younger." Six-year-old kids don't understand that. But parents understand it when their kids have the wrong birthday. They understand that they're either going to have to keep their kids out for a whole year and have them with one group that's no good, or get them in a year too early where that kid's going to seem too weak, dumb, and slow and his image of himself or herself is going to be horrible.

Next, we say to kids, there's only one way you can learn: words. You're going to learn by either listening to me or you're going to learn by reading the words in a book. What about the people who don't learn initially with words? There are a lot of other ways of learning.

And then what we do is call on kids. Right? Some of them love it, they would love to come on Christmas. But some of them are sitting; they never raise their hands. They're engaged in an unconstitutional act--they're praying that I not call on them. But I have to call on them because that's pupil participation, right? What

am I doing to a kid when I call on him in the morning and he doesn't know the answer to my question? I call on him in the afternoon with another question, he doesn't know the answer to that, and the next day? What am I really doing? I am humiliating him in front of his peers. How good an incentive for work is humiliation?

Is it possible to organize a school so that kids don't all come in on the same day and compete unfairly? Is it possible to organize a school for kids who can't turn words into pictures, especially at an early age? . . . Can we provide smaller groups for kids and provide them some privacy as they're stumbling? . . . These are the things that we need to be concerned with. And of course there's something else . . . There's more to intelligence and more to what it is that people need to know in this world in order to make a contribution than what we do in school: Creativity, imagination, the development of hypothesis. To what extent is this part of our curriculum? To what extent do we do it? To what extent do we teach it? To what extent do we examine it? Almost none at all.

There's only one central issue in education, and that's how to keep the kid working and wanting to work. Once you've lost that, it doesn't make any difference how good the textbooks are, how good the lesson is, how well qualified the person is. Nothing else counts once the people who've got to do the work have decided they're not going to do it.

What would a restructured school look like? A restructured school would . . . take into account the various problems that I just raised. Let me talk to you about one that I saw . . . This is a school in Cologne, Germany. It's an urban school. There are a lot of Turkish kids, Moroccan kids, a lot of the equivalents of Chicanos in the United States--people who come to Germany to do work but who don't feel particularly comfortable in the culture. It's a large secondary school (with) 2,200 kids . . . who are in the bottom two tracks, who were tested and told, you're too dumb to go to college.

How is this school different? (If I were a teacher in this school, they would tell me that there are six members to my team, and that I'd be in charge of the kids who are about to come into the fifth grade. For one, they never hire a substitute because the kids run around them and develop disrespect for their teachers. They're given one extra teacher for the team on a permanent basis.) Two, the 120 kids who are going to come in are yours. It's your job to figure out how to divide them into groups or classes. At any time the seven of us would get together and regroup them, because if we found some kid who's at the bottom that's not making it, we could move him. We could change the configuration.

Three, there are no bells. The seven teachers decide. (We decide) if we want to spend the whole morning studying German, or spend the whole day for mathematics. If we found that our judgment was wrong because the kids are getting

restless and it's too long for them today, we would decide and change it . . . So the allocation of students, the allocation of time, and what it is that we as teachers do, all these are collective decisions which the seven make.

As far as I'm concerned, that's what is meant by empowerment. These are the decisions that professionals have to make in dealing with their clients. They're not taking over what the board of education should be doing or what a superintendent of schools should be doing or anything else. They are dealing with the kids that they're going to be working with, in terms of time, grouping, and their pool of talents.

The next thing that these teachers are told . . . (is that they) are going to be with those kids until they graduate at the age of 19. They will not be able to say that they inherited them from some teacher who ruined them and that they can't wait to get rid of them next June . . . The learning is going to be continuous and they're not going to have any new names to learn after they get in here in the fifth grade. This is not an assembly line where you pass these kids on from one bunch of teachers to the next. We have taken a school which is usually a bureaucratic institution and are turning it into a moral community. When you look at yourself in the mirror a couple of years from now, you will know that you are responsible for what's happened to these kids.

I think our institutions need to look at something like the Cologne school . . . I think that the efforts to try to bring about different experiences to children and alternatives will fail, as they did in the 1960s and earlier if we rely on the faculties of individual schools or individual teachers . . . and, I think that we ought to have a professional voice together against people who are educational hucksters.

We need to think of ourselves as architects building a new system. And we need a system in which we plan it in such a way that we recognize that kids learn at different rates and in different ways. We need to maximize the time when they are engaged and when students can interact with each other in working groups, and teachers can also work in groups. We need to maximize the appropriate use of technology and move to a differentiated staff.

I'd like to conclude by saying that restructuring is not a science. I don't come before you and say that whatever we do tomorrow is going to work. As a matter of fact, I can guarantee that the first restructured schools will not work. We will do what everybody does when they build something new; we'll make mistakes. We are talking about a never-ending process of buildings, because human beings change, the environment changes, everything in this changes. It is going to be painful . . . I can't tell you what the appropriate restructuring is in teacher education. I can tell you that just as we were part of the problem and the current school structure's part of the problem, so is teacher education part of the problem.

Featured Symposium

What lessons have we learned from university/school collaborative projects? The directors of three model programs addressed this question at the sixth major symposium of the 1989 Annual Meeting. Reflecting upon their collaboration experiences were Ann Lieberman, University of Washington, Seattle; Rhonda Weinstein, University of California (UC), Berkeley; and Sidney Trubowitz, State University of New York at Purchase. Space does not permit a full presentation of the richness of their remarks. Presented here are the portions of their presentations which will enable the reader to benefit from the major understandings Lieberman, Weinstein, and Trubowitz drew from their experiences.

School and University Collaboration

Ann Lieberman, Rhonda Weinstein, and Sidney Trubowitz

Before describing the lessons they have learned, it is necessary to briefly describe the project each has directed. Currently a professor at SUNY-Purchase, Dr. Trubowitz organized and directed a seven-year collaboration between Queens College of the City University of New York and the Louis Armstrong Middle School. In this collaborative effort, the emphasis was on college and school faculties sharing experiences. College faculty spent part of their teaching assignment working at Louis Armstrong Middle School with school personnel and children. Similarly, the middle school teachers went to the college to teach methods courses and to make use of the physical and educational resources of the college.

Ann Lieberman directs the Puget Sound Consortium, an organization involving many school districts and the University of Washington. It is a broad spectrum consortium that explores funding for quality education. The consortium has, as a primary focus, the creation of visions from which activities, agendas and structures are developed. Among its major projects are the Principal Leadership Academy, Center for Educational Development, and the Teacher Leadership Project.

Rhonda Weinstein directs PATCT (Promoting Achievement Through Cooperative Teaching), a collaborative project between UC Berkeley and a local high school. Dr. Weinstein, a Professor of Psychology, brought to the collaboration a specific research agenda. A goal of the project was to break the cycle of negative, self-fulfilling prophecies in the classroom and create a motivating climate to prevent school failure. The second goal of the project was to examine the features which promoted and sustained the motivation of the collaborators. Teachers and other school personnel met weekly with university personnel to examine relevant research and design alternative instructional practices.

Sidney Trubowitz

Dr. Trubowitz itemized, and later elaborated upon, seven key lessons that he learned from his experience at Louis Armstrong Middle School. Over and over again, he saw how important it was to have the support of people in leadership positions. The active support of the president of his college was particularly important. In commenting on the invaluable support from the president, school dean, and department chairpeople, Trubowitz said, "It gave the project validation and recognition. It communicated to the Board of Education bureaucracy with whom we were working that this was important. It communicated to the school staff the college's investment. It communicated to the rest of the college that this was a valuable project." There were concrete results as well. Access by school people to college facilities was made easy. Young faculty, concerned with the reward system of the college, were more easily recruited into because administrative support for the collaboration gave them hope that their participation might receive some consideration with regard to rewards.

Secondly, the selection of faculty who understand public schools and are sensitive to those who work in them was considered crucial by Trubowitz. Those faculty couldn't be the kind who easily find fault, those concerned with a narrow research agenda, or those wedded to the practice of visiting student teachers by darting-in and darting-out of schools. The faculty needed to be those who, "... wanted to help, yes, but also wanted to learn. They needed to be people who were going to spend time there and be there frequently," Trubowitz emphasized.

He found that shared experiences between college and school staff members was the most effective way to bridge the distance and reduce the frequent antagonism between college and school cultures. College and school faculty taught together, shared conference presentations, co-authored articles, attended the same parties, participated with each other in student-faculty basketball games, participated as equals in inservice programs, and in other ways built a common culture through shared experiences.

As was the case with Ann Lieberman, Trubowitz did not initiate the project with a set of narrowly constructed objectives to be achieved. There were some general notions of what a good school was, "...but we were most interested in establishing the collaborative process. I learned that a collaboration is a living organism and it represents a fluid process." Along the way to the development of a collaborative relationship, they went through stages. "We went from skepticism, hostility, distrust to truce, to a period of mixed approval, finally to a period of acceptance. It helped me to realize that after a period of good feeling, there might be retrogression and there will be a need to renew the collaboration."

Trubowitz was struck with the pervasive feelings of isolation that exist in schools and colleges. He emphasized that teachers are often isolated and respond well to recognition. He views the idea that colleges are communities of scholars as mythical. Thus, he found that the self-interest of everyone is served by sharing experiences and ideas.

"I don't think replicability is possible because I think developing a collaboration is a creative enterprise," Trubowitz concludes. He believes collaborative projects are an important way to breakdown insularity and to integrate theory and practice. He proposes that by having all colleges affiliated with a public school this collaborative process will grow.

Ann Lieberman

Supporting the conclusion of Sidney Trubowitz, Ann Lieberman premised her remarks by agreeing, "...if we can't replicate models, we can come to understand some sort of general things that seem to happen no matter whom we are collaborating with, and no matter what the context." For Lieberman, the first major set of learnings focused on how one thinks about building an agenda for collaboration. In building such an agenda, there needs to be a struggle, sometimes a revolutionary fight, "...to have a big vision. Somehow we would create a new organizational culture, but nobody knew exactly what that meant. University people are very good at talking about these things and the ideas are wonderful, but there are not too many people who are really experienced with how you go out and actually mobilize people. I grew up watching people organize; I think that my ability to organize is the best skill I brought to the university.

"The superintendents kept saying to me, what are your goals? To myself, I kept saying, I don't know. The big goal really is to make constructive change. I tried to educate them at the beginning to say that once we begin to do things together, out of the doing we will become clearer about what it is we need to do. Because this approach is the antithesis of what school people are being pressed to do, it involves a considerable amount of risk-taking." Although there is pressure for clear objectives and certainty from funding sources, she thought that she had learned, "...not to fight the certainty, but to try to understand how to give people some sense of certainty in the face of ambiguity."

The agenda had to be created by creating a series of activities. "You create activities, you get people involved, and out of the activities people learn more; they learn what's difficult, they learn what's possible. And as long as the vision is big, people continue to struggle with something larger than themselves and larger than their institutions."

Lieberman also learned that, "...rather than having a structure and then putting activities into it, as we do in the university, and as certainly the schools do, the collaborations are very different. You have a big vision; you build an agenda by actually doing things; and then you create a structure to support the agenda. That is the antithesis, I think, of the way we've all been brought up. So the structure has to now speak to what you need structurally to support the kinds of activities that are shaping the agenda." An approach Lieberman used was to have the policy making group, the Coordinating Council, create and empower action groups beneath it to act upon the ideas they generated.

Lieberman thinks that school/university partnerships do provide for much needed changed roles in relationships. "At the University of Washington, there are many people who have longed to work in the field because they care about school people; because they are very knowledgeable and they have not been rewarded for that. Not only does it provide experienced professors with talent for working in schools to do so, it creates the opportunity for a new breed of professor who really can go both ways - work in the schools and also work in the universities."

In her conclusion, Ann Lieberman extended Sidney Trubowitz's comments about building community. "I think some of us care desperately about doing that. I think all of us are in need of each other for some very powerful, important reasons. The university is isolated in its own pockets and much of (its) research is not helpful to understanding the complexity of the problems of the schools. It is not helpful because we have been distanced from one another. We need community with schools, but we also need community within our own universities and colleges. Hopefully, these school/university collaborations are one means to do that."

Rhonda Weinstein

Unlike Lieberman and Trubowitz, Rhonda Weinstein entered a school/university collaboration with a specific research agenda. "I'm that example of someone who is trying to bring to reality something that I learned from basic research. I wanted to quantify it and study it, but in a collaborative relationship with teachers," Weinstein stated as she began to describe her project. "The kind of environment we sought to put in place in the classroom for students, and particularly students at risk, was precisely the kind of environment that we created together as collaborators." Weinstein wanted to apply toward classroom and school redesign the knowledge of eight elements of classroom and school environment which communicated low expectations to students. Because of her belief that nothing would come of a prescriptive change effort, she wanted to work together with teachers and administrators collaboratively in a redesign effort.

"We wanted the school staff to become consumers of research. This was a very critical element. If they didn't understand the research literature that we understood, they would not see the need for change; their expectations and perceptions would not be changed. We wanted to collaborate with the school staff in the design of new policies and practices. And, we also needed to create a school-based, regularized structure for collaboration where we could interact in a continual way," Weinstein explained.

Because the dominant mode of instruction in high schools is prescriptive, teachers often come to a collaborative enterprise with the expectation of being spoon-fed. "We learned that one of the tasks of the collaboration is to create a context for meaningful tasks with sustained interactions, not small tasks like worksheets in the classroom." In the Weinstein project, the focus of sustained interaction was the reading of research. "There was much resistance to reading the research. But teachers became empowered once we began to do this; empowered by their increased knowledge of what was in the literature. They resented our jargon and we were teased . . . about the way research articles are written, but it gave them a link to further knowledge and to further growth."

A second concern was the composition of collaborative groups. Based upon the learning of what facilitates the collaborative enterprise, PATCT gave emphasis to the diversity of the heterogeneous composition of professional training groups. It was, of course, their hope that such a change would be made in the composition of student groups in the high school.

Performance opportunities and feedback in collaboration were stressed. Schools offer a very limited range of performance opportunities for students and staff with the result that a very narrow range of talents is exhibited. Performance opportunities were created for participant teachers and, in turn, for their students.

It was also learned that the university/school collaboration had to be based on cooperation and shared leadership rather than competition and autocratic direction. The purpose was to model in the collaborative effort of the university/school partnership the desired changes sought in the school climate experienced by the high school students.

Finally, Weinstein, found that school, district, community, and university support was critical in making a collaborative effort work. She was continually striving for the support of various organizations as support was required throughout the project. Summing up her remarks, Rhonda Weinstein told of the teacher who, at the end of the project, said, "We the teachers have taught you about the constraints we face in changing expectations for students, and you have taught us not to be stopped by the constraints."

Selected Papers

In total, over 70 presentations were made on model programs, programs that spanned the country from New York and Florida, to Texas and the Midwest, out to Washington state and California, nearly every state in between, and Canada as well. Their scope covered nearly all collaborative efforts possible from public/private to international and interuniversity models of educational programs.

Creative Partnerships: Models for Arts Education

August Coppola
School of Creative Arts, San Francisco State University

Arts education is becoming a critical concern of the national education reform agenda, as it comes to be recognized as a primary component of a strong curriculum. National, state, and local task forces have been formed to define the scope of arts education and its appropriate placement in our schools. The implications of the concerns and recommendations put forward in *American Memory* and *Toward Civilization,* publications of the National Endowment for the Humanities and the National Endowment for the Arts respectively, have spirited a dialogue that is raising important questions about the ideological base we are trying to promote in arts education. Challenging issues being addressed include the value of creating a sequential, testable curriculum in the arts; academic versus experiential methodologies; the hierarchy of aesthetic valuing; and the way minority and ethnic groups are presented in arts education. Also of vital concern is the impact arts education reforms will have on students and the role of teachers, artists, and arts organizations working in this field. Taking a look at the intent of arts education, several questions arise. Are we attempting to create art consumers, audiences, and identifiers of culture or creative individuals with engaged imaginations, problem solvers, visionaries, people who will contribute new thinking and ideas to our society and our future?

Laying the groundwork for extending this dialogue to members of the American Association of Colleges for Teacher Education, leading arts and education professionals on this symposium panel presented contemporary arts education models for discussion. As a point of common reference, we explored public/private partnerships, collaborative relationships, education preparation resources, and innovative approaches to teaching in the arts, and examined their relationship to the entire arts education agenda. The "Creative Partnerships: Models for Arts Education" session brought together a panel of six arts educators and administrators to share ideas and information, experiments and results which have been developed in six collaborative programs in arts education for students ranging in educational level from elementary school through college. The six programs reported on are found in northern and southern California and are all multidiscipli-

nary and innovative in character: The Performing Tree, The Los Angeles County High School for the Arts, The Headlands Center for the Arts, School in the Exploratorium, The Arts Bridge to College Program, and Young Audiences.

Common elements of these programs are:

* An emphasis on direct experiences in the "doing" or the "experiencing" of the various arts forms;
* An on-going emphasis on creativity and imagination as essential components of the artistic act;
* The creation of not only art consumers, audiences, and identifiers of culture, but also creative individuals with engaged imaginations, problem solvers, visionaries, and those who will contribute new thinking and ideas to society and our future;
* The programs all draw both strength and vitality from the collaborative efforts which make them possible. The schools, the practicing artists, public and private enterprise, museums, theatres, and concert organizations provide resources: funding support, innovative approaches to teaching and learning, and a context within which to approach and examine the entire arts education agenda; and
* Each of the programs places heavy emphasis on participant contact with practicing artists--the painter, sculptor, dancer, musician--as an essential means of direct artistic communication. Such direct contacts are intended to provide some freedom from the necessity for excessive reliance on verbalizations and mental abstractions which can so often prove a barrier rather than an aid to both artistic experiencing and creativity. At the same time, all the programs involve--and some place particular emphasis upon--helping the creative artist understand the processes and challenges of arts education within the public and private school or community setting.

The following program summary reports utilize a common format beginning with a program description which includes information as to the genesis of the program, its current mission and status, and some sense of its scope in terms of those it serves. A specific report section identifies the particular collaborative efforts and entities which are a part of the program's activities. Another section describes any particularly unique features of the program and a specific identification of the ways in which it can serve as a model for the development of congruent or similar programs and activities. Each summary concludes with future program plans.

Program Summary Reports

Performing Tree

Performing Tree is a community-based, private, nonprofit educational organization initiated in 1973 and dedicated to children and their need for art, dance, music, theatre, and the visual arts as essential elements in their basic education.

The Los Angeles based program offers students opportunities to interact with professional artists, participate in sequential arts programming, develop analytical and problem-solving skills, and to increase their self-awareness, creativity, and cross-cultural understanding. In 1987-88, the entire program served over 730,000 children in 508 public, private, and parochial schools/sites, helping to build interest, participation, and future audiences for the arts.

Performing Tree's central purpose is to collaborate with educators and others responsible for giving children access to the arts in developing methods for enlarging the learning experience of youth through the use of arts in education. For the schools, Performing Tree staff auditions and carefully selects professional artists who will present high quality participatory performances at schools. It trains them to work in the classroom with students and to serve as resources to teachers. For educators, Performing Tree offers development courses designed to strengthen arts instruction or relate the arts to other areas of the curriculum. It also helps them identify funding sources and write grant proposals. For artists, Performing Tree's mentorship program provides training for those who have not worked in schools by pairing them with artists with such experience. Program staff offer technical assistance to artists and arts organizations in professional development; handle booking, scheduling, and contracting; and serve as an umbrella organization for professional artists and groups.

Future plans are to increase arts education services to schools, expand inservice programs for teachers, and develop a program to assist teachers in developing a sequentially based arts education curriculum. New publications and other arts education resources are planned, as well as enlarging and strengthening collaborative networks and projects in arts education to link schools with colleges and universities, specialized arts schools and organizations, museums, theatres, libraries, and other interested institutions. The program plans to expand artist services, training programs, and sources of funding.

Los Angeles County High School for the Arts

Located on the campus of California State University (CSU) at Los Angeles, the Los Angeles County High School for the Arts (LACHSA) is the county's first public school for the arts offering an opportunity for specialized instruction otherwise unavailable to bright, talented students who have a proven commitment to the arts. The school satisfies California requirements for secondary education and college entrance. A comprehensive curriculum in letters and sciences is offered as well as concentrated study in the student's chosen arts discipline.

The program's location on the CSU campus at Los Angeles and its cooperative relationship with the University are critical in the high school's ability to utilize the

facilities and resources for excellent arts and academic instruction. Support for the tuition-free High School for the Arts comes from a combination of public and private funds. LACHSA receives the same state funding as every other public school; however, educational costs per student are almost double what is allocated by the state due to the specialized nature of the curriculum, necessitating outreach to the private sector for support. The LACHSA Foundation, an independent nonprofit organization raising support for LACHSA, generates private sector support necessary to the high school in providing high quality educational programming.

Collaborations with the arts community contribute to an ever growing resource base, extending multiple and diverse opportunities to students and offering access to a wide range of professional performing and visual artists. Special programs, demonstrations, workshops, lectures, etc., are constantly offered with many artists and arts organizations. Such programs have featured the Joffrey Ballet, Bella Lewitzky, the Los Angeles Philharmonic, the Sequoia String Quartet, the Ashland Shakespeare Company, and many others.

The high school offers its staff many opportunities for development--attending conferences, seminars, and workshops encompassing a wide range of arts and academic subjects. The high school itself often serves as a showcase and resource for university education students fulfilling arts and education observation requirements.

Future plans for the LACHSA include ongoing planning and development of new programs and courses. Expectations over the next few years include the development of courses in musical theatre and cinema/video production.

Collaborative Curriculum Project

This project is a collaborative partnership involving the Headlands Center for the Arts and the Headlands Institute, both nonprofit organizations working under a cooperative agreement with the National Park Service. The two organizations are jointly developing and implementing the Collaborative Curriculum Project, in cooperation with the Sausalito School District, to improve literacy skills for at-risk fourth and sixth grade students. The project utilizes the resources of the Marin Headlands--a 13,000 acre component of the Golden Gate National Recreation Area rich in native fauna and wildlife--along with naturalists and artists to structure learning situations. The curriculum itself involves a series of lessons designed to develop a sensitivity to children's external and internal environments as a device to build literacy skills. The project plans for work to occur in the classroom and immediate school environment, as well as on field trips to the Headlands.

Naturalists will provide the content and context for the program centered in the natural sciences and environment, while artists develop a variety of modalities to

explore perception, induce expression, and further the understanding of language, natural phenomenon, and creative thinking. Students will observe the natural environment. A group of interdisciplinary artists and naturalists will work directly with students, leading and involving them in participatory, "hands-on" activities. School teachers assist the naturalist/artist team, providing on-going implementation and evaluation tailored to the appropriate grade level and abilities of the students. Also, a group of arts and education graduate students from San Francisco State University will be observing and participating in formulating and evaluating this pilot project.

The project was initiated in December 1988 and piloted the Spring semester of 1989 in three elementary schools in the Sausalito School District. Hopefully, the program will be built and strengthened over the years and extended to many schools to provide a model that can spread to other organizations and locations. Plans are initially focused on elementary school, with the potential to eventually reach high school students.

School in the Exploratorium

The School in the Exploratorium is a fifteen-year-old teacher training program to provide hands-on instruction in science and art within an interdisciplinary mode. The resources of the Exploratorium and the expertise of its education staff are utilized to offer teachers the opportunity for short or long-term involvement with the goal of creating a framework that functions as a catalyst for improving the quality of elementary education.

The program consists of three levels. First, teachers learn about natural phenomena--light, color, sound, and visual perception--in a series of three day-long workshops at the Exploratorium. At the second level, the opportunity for in-depth study of a particular phenomenon is available. The third and most advanced level is a Summer Institute, a three-week teacher training program offering intensive, experiential exploration of natural phenomena. This institute is followed up by an artist who visits the classrooms of participating teachers during the school year. Teachers regularly return to the Exploratorium for support and guidance.

The program's workshops are offered at the Exploratorium and give participants access to its facilities and resources. The workshops and course materials are developed in the Exploratorium's education department and are taught by practicing artists and scientists. The Exploratorium also works in cooperation with Bay Area school districts, schools, and educators in developing, implementing, and evaluating this program.

The primary goals of the program are to provide specialized training in science and art to school teachers and to develop and extend professional learning oppor-

tunities, curriculum materials, and resources as a catalyst to improve the quality of education at the elementary school level. School in the Exploratorium has worked with thousands of teachers in many schools within San Francisco and Marin school districts. Future goals are to involve other school districts and many more teachers throughout the Bay Area.

Arts Bridge to College Program

A collaborative program in arts creativity and education, the Arts Bridge to College Program is currently working with selected students of the High School of the Arts in cooperation with the San Francisco Unified School District. The program is sponsored by the School of Creative Arts, San Francisco State University (SFSU), with the approval and support of the California State University.

Since its initiation on a pilot basis in spring 1988, the Arts Bridge to College Program's vision is one of providing special admission to SFSU at no cost for gifted high school students in the arts, offering them college-level instruction. The goal of the course is to explore and nurture the very essence of creativity and the creative spirit through examination and exploration of its models. Students are recommended to the program by their high school teacher and principal.

The involvement of practicing artists in music composition, sculpture, film, dance, video, and theatre arts is a central feature of this program. Students are given the opportunity to hear the artists, observe some of the creative process itself, and discuss various approaches and paradigms of the creative act. The very positive response of the course has led to two major developments: 1) the program's establishment on a permanent basis at SFSU and 2) its expansion to a two-semester course sequence. The emphasis in the first semester is on exploration of the nature of creativity in the arts. The second semester course provides students with a laboratory experience in arts collaboration that will culminate in a performance or production.

The participation and illumination provided by an interdisciplinary group of practicing artists in the academy and community are at the core of the philosophy behind the course and the activities and experiences planned for the class. Students additionally benefit from learning "first hand" what it means to be an artist and the nature of the commitment involved.

It is our belief that the attempt to approach the creative spirit and essence in an experiential learning situation is the uniquely important feature of this program. The strategies we employ remain flexible to allow for the change necessary in maintaining the integrity of a creative educational environment. The program will serve as an ideal showcase for arts education and credential programs currently in place on the campus.

For the immediate future, the plans for the Arts Bridge involve extending opportunities for study to students from high schools throughout the San Francisco Bay Area, developing the second-semester lab course via experimental implementation and further utilizing the program as a means of exemplifying positive and productive approaches to arts education for arts educators.

Young Audiences

Young Audiences seeks to establish the arts as an essential part of the education of young people by presenting excellent arts programs in the public schools. Since 1952, the organization has trained professional artists to give educationally valuable performances, workshops, and residencies. Last year, 2,232 artists presented 32,700 programs to more than five million school children across America--one out of every six in this country.

Chapter boards are comprised of interested community volunteers and business people, with committees that draw on the expertise of leading local educators, teachers, and artists. Professional staff facilitate the interaction between artists and teachers as part of the training provided for in the program. The degree of interaction varies from chapter to chapter. For instance, in Kansas City, through the Arts Partners Program, Young Audiences plays a critical role in facilitating and implementing a comprehensive sequential K-12 arts program involving the community's major arts organizations.

Young Audiences' most unique feature is that there is no one model prescribed to work in every community. In many chapters, performances, workshops, and residencies are developed and scheduled independently. The smallest program unit is a mini-residency. Young Audiences itself is a community-based collaboration of artists, teachers, parents, community leaders, and business leaders.

Young Audiences plans to continue in its role as a bridge forming partnerships between the arts community and the education community, and informing the process with the vast experience of 38 chapters and the national office.

Summary

All the programs have reported considerable success in realizing their initial goals and are planning to continue and expand both the programmatic content and the outreach components. This would include such things as increased arts education service to schools, preparating and testing of new curricular guides and materials for arts education and arts educators, enlarging and strengthening of collaborative networks, diversification and increase in funding sources, and a continuation and expansion of the process of forming bridges and partnerships between the professional arts and the professional arts education communities.

Seeking Excellence From Preservice through Induction: Public Schools, State Department, and University Collaboration

Betty Greathouse, Gladys Styles Johnston, Billie Enz, Gary Anderson, and Nelson Noggle
Arizona State University

During the past century, the most astounding explosion of knowledge in human history has occurred. Science has revolutionized our understanding of nature; the social sciences have been developed and have flourished; the humanities have been enriched and dramatically enlarged; technological advances and radical social changes have outstripped the predictions of even the futurists (Toffler, 1970). To keep pace with these advances, all segments of the American population demand a stronger and more effective educational system (Association of Teacher Educators, 1986; Boyer, 1983; Education Commission of the States, 1986; National Commission on Excellence in Education, 1983; National Education Association, 1984; National Governors' Association, 1986). This statement is parallel with the view of the Carnegie Task Force (1986) that the advancement and strength of our country are linked inevitably to the strength of our educational system.

Nothing less than revolutionizing the preparation of teachers is adequate to meet the challenge of these sweeping changes. However, significant and enduring change is most likely to occur through evolutionary approaches that emerge with broad-based support of professional leaders who act in unison and with the best interest of our nation's youth in mind (Haberman & Collins, 1988).

The College of Education (COE) at Arizona State University (ASU) began its drive toward this "significant and enduring change" in 1983, when it initiated a plan designed to develop a stronger, more effective teacher preparation program. The program goal was to prepare teachers to be effective in the broadest, most diverse and demanding educational setting in history, and to meet the continuing challenges of this fast-paced society. This new program was developed to prepare education professionals who are sensitive to, and effective in, a multicultural society, who are responsive to individual students, and who can access and use new information as the knowledge base expands. The cornerstone of that plan was collaboration among educational leaders. We wanted to build successful partnerships with multiple entities that had vested interests in education. As Corrigan (1982) stated, "To be effective, teacher education must be a collaborative effort which involves the university, the organized teaching profession, and the operating schools and school systems, including their communities" (p. 38). Committed leaders from the university faculty, public school teachers and

administrators, and state education department personnel became instrumental in developing a comprehensive, high quality, professional program in teacher education from preservice through induction. The models of partnerships were successful because we were cognizant of, and worked to build, four elements essential for successful partnerships in teacher education. The four elements are timeliness, mutuality, trust, and results (Smith & Auger, 1985-1986). This collaboration was not devoid of conflict; however, conflict is the requisite prelude to negotiation. This attitude set the stage for all parties to address differences and to compromise, when necessary, without jeopardizing quality. Thus, the resolution of conflict gave rise to feelings of trust and mutuality, and we attained the goal of developing an excellent teacher education program.

Four years ago, as a result of this extensive collaboration, the COE faculty at ASU offered an entirely redesigned teacher education program. This new program represented the most comprehensive change in teacher education at ASU in 40 years. To promote a full appreciation of the new program and the collaboration involved in accomplishing this goal, it is desirable to describe the original program, the redesigned program, and the associated collaborative efforts.

Teacher Education Prior to Redesign: Autonomous Traditional Programs

Program Organization

As was the case in most colleges of education around the country prior to 1985, teacher education in the COE at ASU consisted of three basically distinct programs. Offered by faculty in three autonomous academic units, the programs were a) Elementary/Early Childhood Education, b) Secondary Education, and c) Special Education. A preprofessional studies program included general studies and subject matter specialization. Then students were admitted to the professional studies component, including a core sequence in foundations of education, methods of teaching and learning, and field experience and student teaching.

The Professional Teacher Preparation Program: An Integrated Thematic Clinical Model

This section provides a description of the collaborative process and specific information about the products: the Professional Teacher Preparation Program, Teaching Centers, the Arizona State University/Maricopa Teacher Residency Training & Research Project, and the Teacher Preparation Assessment System (TPAS).

Today's teacher education program at ASU contrasts strikingly with the program's past. The dynamic Professional Teacher Preparation Program (PTPP) incorporates the collective wisdom of personnel from the public schools, college and university faculty, and state agencies, as well as the latest research regarding the essentials of quality teacher preparation programs (American Association of Colleges for Teacher Education, 1983; Berliner, 1989; National Association of State Directors of Teacher Education and Certification, 1986; National Council for Accreditation of Teacher Education, 1986; Robinson, 1982; Shulman, 1987). As discussed in the introduction, the extensive program redesign required significant involvement, cooperation, conflict, compromise, consensus, and continuing debate.

Program Organization

In the fall of 1983, faculty representatives from the three autonomous departments (Elementary/Early Childhood Education, Secondary Education, and Special Education) reorganized informally to form a group identified as the Professional Teacher Preparation faculty. The purpose of the group was to redesign the three distinct teacher preparation programs. The result was one excellent, interlocking program, which was piloted in Fall 1985. In essence, all teacher preparation students are admitted to the PTPP. In 1986, the entire COE was reorganized formally from eight autonomous departments into three divisions: Curriculum and Instruction, Psychology in Education, and Educational Leadership and Policy Studies. Although the Division of Curriculum and Instruction has primary responsibility for the redesigned program, other COE faculty and faculty from outside the college also make contributions.

Preprofessional Studies

General studies. Requirements for general education have been intensified. Students must complete a majority of these requirements prior to admission to the PTPP. This pre-education component includes course work in philosophy, physiology, and psychology. Knowledge included in this segment has been labeled general content knowledge by Shulman (1987), and provides the undergirding disciplines for teacher education (American Association of Colleges for Teacher Education, 1983; National Council for Accreditation of Teacher Education, 1986).

Subject matter specialization. A subject matter specialization component, consisting of a major teaching field, is required of every student who seeks certification at the secondary school level. A subject minor is required for those pursuing elementary or special education certification.

Professional Studies

Professional core. A core professional education component is required of all teacher education students. This component, which consists of the basic principles of learning, is the foundation of teacher preparation. It is enhanced by integral field experiences in public schools--field experiences anchored in serious study of three areas of knowledge: human development, the context of learning, and professional decision making.

The human development segment provides knowledge of the learner. The segment on context of learning offers knowledge of educational contexts (Shulman, 1987), as well as an understanding of the governance structure of schools, awareness of professional ethics and responsibilities, perception of classrooms and schools as social systems, and insight into cultural influences on learning (American Association of Colleges for Teacher Education, 1983; National Association of State Directors of Teacher Education and Certification, 1986; National Council for Accreditation of Teacher Education, 1986). The importance of professional decision making cannot be overestimated (Gideonse, 1986; Lanier, 1982). Therefore, professional decision making is a strong theme and an integral part of every professional education course and field experience. Work in this segment also includes general pedagogical knowledge, knowledge of educational goals and values (Shulman, 1987), and knowledge of classroom management strategies.

Teaching specialization. A specialized professional component, mandatory for all PTPP students, was designed to promote competence in teaching specific academic levels and types of learners. A student may concentrate on acquiring the skills and knowledge appropriate especially for early childhood, elementary, or high school education, or those appropriate for teaching children and youth who have special educational needs. Curriculum knowledge and specific pedagogical content knowledge are acquired through this component (American Association of Colleges for Teacher Education, 1983).

Field Experience and Student Teaching

A field experience component, which spans all semesters of the PTPP, is blended as part of the core professional and specialized professional components. The field experience component culminates in full-day, all-semester student teaching, designed to integrate sound educational philosophy, theory, and methodology in actual school practice. This component provides the needed classroom experience early in and throughout the duration of the program.

Teacher Induction

The induction component of the redesigned program extends the college's reach and responsibility for a select group of graduates into the first years of their careers. The ASU/Maricopa County Teacher Residency Training and Research Project, in cooperation with the State Department of Education and the public schools, provides the structure and framework for one-to-one guidance to beginning teachers, thereby increasing their instructional effectiveness. The need for this type of support and the positive effects of support on beginning teachers have been well documented (Lasley, 1986).

Continuous Assessment

The Teacher Preparation Assessment System (TPAS) involves continuous evaluation of students and faculty, which is essential to preparing excellent teachers and improving the quality of the teacher education program (Commission on Teacher Assessment of the Association of Teacher Educators, 1988).

The redesigned program, depicted in Figures 1 and 2, reflects the considerable collaboration that was initiated from within the College of Education, extended throughout the university, and included numerous public schools and the State Department of Education.

Collaboration: The Vehicle for Meaningful Change

Collaboration Within the College

In the fall of 1983, a task force representing faculty from the three autonomous departments of Elementary/Early Childhood Education, Secondary Education, and Special Education was charged with devising a plan that would facilitate the development, adoption, and implementation of an effective and efficient program for teacher education. The task force was later expanded to include faculty representatives from other departments throughout the college, faculty associates, public school personnel, and graduate students, thereby making the involvement of vested entities an integral part of the redesign process.

The task force worked throughout the spring semester to develop research-based plans for the new program. In August 1984, the group presented a sequence of planned guidelines in the areas of admissions, retention, assessment of progress, graduation requirements, and field experiences. During a labor intensive spring, three curriculum teams led by the task force began to specify content, goals, objectives, and possible assessment for each of the three themes:

human development, context of learning, and professional decision making. Once again, each curriculum team involved in the process included representatives from the public schools, either through direct participation or through surveys.

In the spring of 1985, the curriculum teams presented their work to three larger groups of educational leaders for further specification. The latter groups proposed final content within the strands, specified content outcome statements, and identified possible methods of assessment.

Concurrently, all COE faculty were asked to indicate how they wished to contribute to the program. Faculty members who expressed high interest in participating were grouped into instructional teams. Sixty faculty members throughout the college indicated interest in offering the new program. Additionally, the three curriculum teams worked separately and met as a total group two to four times a month to ensure that students had an integrated and carefully sequenced experience.

The instructional teams piloted the new program in the fall of 1985. The bodies of knowledge contained in each theme of the program were sequenced developmentally, semester by semester, throughout the program, and changes were made in the original conceptual model (Engelhardt, 1985). Although fewer meetings are held now, program review and modification are ongoing.

Collaboration Across the University

Initially, university-wide faculty groups focussed on the general studies component. Cooperation in this arena was least problematic because the Board of Regents had charged the three state universities with upgrading their general studies requirements. A University General Studies Council, with representatives from all colleges at ASU, was established to ensure that all students, including teacher education majors, would have a strong, broad background in the arts and sciences. Because Arizona has a large community college system, articulation with that entity is essential. Therefore, the Board of Regents established an Academic Programs Articulation Steering Committee which, in turn, organized an Articulation Task Force for each discipline. The COE has several active members on this task force.

During the teacher preparation reform, collaboration with colleges external to the COE increased. The position was established that faculty held primary responsibility for preparing teachers and other educational personnel. However, COE faculty were genuinely willing and needed to share that responsibility, which was a key factor in establishing an effective operational base. To date, the COE, College of Fine Arts, and State Department of Education have combined forces

FIGURE 1. Pre-professional studies

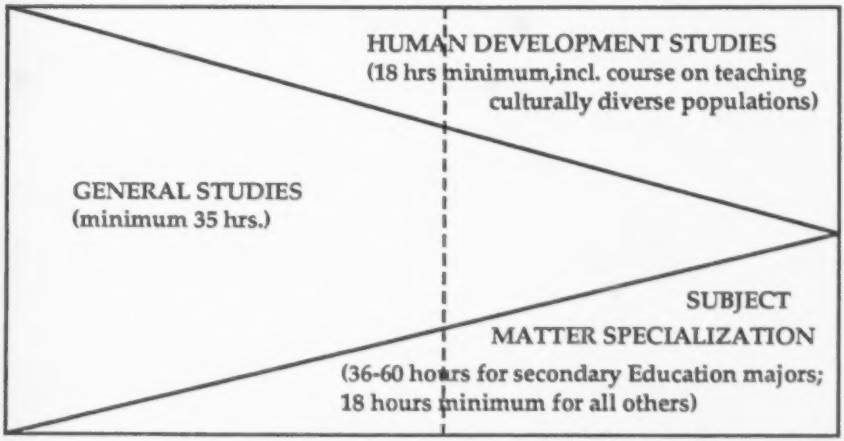
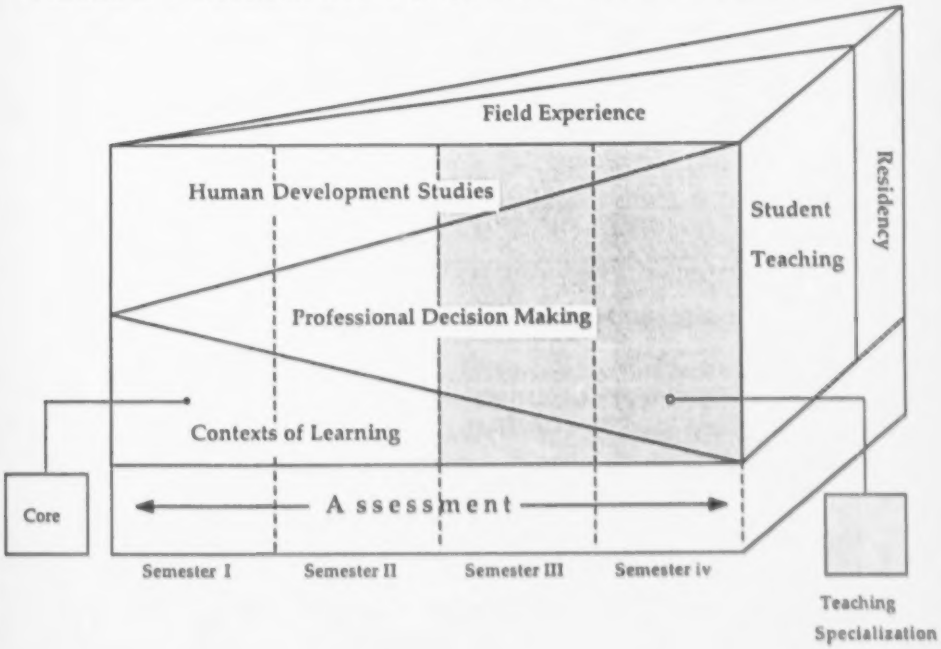


FIGURE 2. Professional teacher preparation: thematic clincial model



to improve greatly various program adaptations, specifically for music, art, theatre, and dance education. In addition, a joint committee of faculty members from the College of Liberal Arts and Sciences and COE meets regularly to coordinate multiple aspects of the Teacher Preparation Program for secondary education majors. To further enhance university collaboration, a proposal has been forwarded to the university administration to recommend that the joint committee be replaced by a University Council for Teacher Education.

Collaboration With Public Schools: Teaching Centers as Vehicles for Field Experience

While the collaborative activities were occurring within the COE and throughout the university, a member of the original task force worked with representatives from public schools regarding the collaborative development of sites. These sites would serve as vehicles for students' field experiences.

Countless meetings of COE faculty with public school administrators and teachers resulted in an agreement between ASU and public school districts. Participants agreed to jointly establish teaching centers to improve the quality of a) the preparation of preservice teachers, b) instruction in public school classrooms, and c) student supervision and support services for students and teachers within the schools.

The Teaching Center. The Teaching Center consists of a senior high school and the schools that feed it, usually one or two middle and/or junior high schools and four to eight elementary schools. Collaboration has been highly successful in this component of the PTPP.

Each center is governed by a board made up of the building coordinators from each school in the center and chaired by the college liaison. The liaison is typically a full-time faculty member who teaches course work within the PTPP but has a load reduction for liaison work. The board establishes policy within the teaching center, selects placement teachers and makes assignments, monitors progress of students, assists with placement across semesters, and provides feedback to the liaison. The structure and operation of the Governance Board facilitate "long-term relationships that will survive tactical victories and defeats" in the "clashes" that sometimes occur between teacher educators and public schools (McDaniel, 1988). Student interns in elementary/early childhood and special education usually spend their four semesters within the same teaching center, moving among the various buildings. Secondary students spend at least one semester in the high school of a second center. Such continuity permits the liaison and teaching center personnel to track and monitor the development of students' skills.

Closing the gap between theory and practice. Upon admission to the PTPP, every student enrolls in the initial semester of university-based course work and in an accompanying noncredit field experience. While students take increasingly specialized course work, concurrent registration is required in the field experience segment each of the two subsequent semesters. This requirement is analogous to the laboratory requirements typical of science courses. The field experience gives students an opportunity to "make connections between the theory and the methods that are available to them, and the practical situations they encounter in different contexts" (Cohen & Gillman, 1988). The field experience is planned so that each PTPP student works with students who are at various grade levels and represent culturally and economically diverse populations. The culmination of the program is the semester of student teaching (Semester IV) in which students spend all day for 15 weeks working under the guidance of a master teacher.

In Semesters I, II, and III, where students spend four, six, and eight hours a week in the classroom, the classroom placement teacher is the primary supervisor of the student's activities. However, the building coordinator and the liaison serve as part of the support system for both the student and the placement teacher. During the student teaching semester, the COE student teaching supervisor and the classroom master teacher serve as the primary supervisors.

The classroom as a laboratory. The student's activities in the placement classroom are determined by four sources: course work instructors, the Office of Professional Field Experience, the placement teacher, and the student.

Course instructors create assignments that link the content of their courses with the observation or application of that content in a real classroom. Assignments may include, for example, child study project in a course on human development, creation of classroom tests in a course on assessment, or development of a series of vocabulary lessons in a course on reading methods. Thus, knowledge is linked constantly to application. Placement teachers help monitor and evaluate the activities and provide feedback to course instructors.

Evaluation. Progress in the PTPP is determined not only by success in course work but also by success in the field experience. Each semester, placement teachers complete a midterm and final observation based assessment of the students. Information from the placement teachers, combined with data from the liaisons and course instructors, is forwarded to the Office of Professional Field Experiences. Students who cannot demonstrate the instructional, organizational, and interpersonal skills necessary to be a teacher are denied further progress through the program.

Collaboration With the State Department

In most professions, new members receive support and encouragement as they work with and learn from more experienced colleagues during their beginning years (Huling-Austin, 1987). Not surprisingly, beginning teachers have also identified a strong desire for moral support and encouragement (Anderson & Shannon, 1988; Enz & Anderson, 1989). But in the teaching profession, beginners traditionally spend their entire workday isolated from more experienced teachers. This isolation prevents collaboration with peers and greatly reduces the possibilities of learning from one another. Teacher induction programs bridge the traditional isolation, based on the belief that continuous instructional support and guidance from experienced master teachers will enhance the development of beginning teachers.

Developing a solution: Induction programs. The ASU/Maricopa County Teacher Residency Training and Research Project is an example of the power of synergistic collaboration. Funded by the Arizona State Department of Education, the Residency Project is an induction program that combines in partnership the efforts, resources, and personnel of the College of Education at Arizona State University, the State Department of Education, and 12 school districts in Maricopa County. This project's goal, to provide instructional support and guidance to beginning (resident) teachers, is accomplished by training mentor teachers to provide one-to-one daily assistance to resident teachers. The project recommends that mentors be highly competent, experienced, nurturing individuals who are matched as closely as possible to a resident's grade level or subject area. Using these criteria, district administrators select mentor and resident teams. The mentor's dual role is complex and involves advising as well as coaching. As advisor, the mentor has three major functions--to meet the professional, personal, and instructional needs of the resident.

Surveying over 350 beginning teachers, Enz and Anderson (1989) found new teachers highly valued the opportunity to be observed and receive feedback about their performance from other teachers. As coaches, mentors have the unique opportunity to affect directly the instructional development of their residents through a continuous coaching cycle of observation, conference, and feedback.

Induction training. To assist with the induction process, COE personnel conduct an intensive 16-hour workshop to teach mentors how to assess lessons objectively and facilitate beginning teacher growth by providing developmental feedback. To help mentors learn to be objective observers, a major portion of the training involves instruction in use of the Arizona Teacher Residency Instrument, which consists of 30 observable teaching competencies and incorporates both

hierarchical and discrete scales. The instrument is divided into three sections: a) teaching plans and materials, b) classroom procedures, and c) interpersonal skills. Observing and recording the resident's classroom performance is a critical aspect of mentoring. During training, mentors are taught scripting skills that enable them to record the classroom performance of their residents. Scripting the lesson causes the mentor to be more objective and allows detailed analysis of the lesson. Conferencing is the most important aspect of mentoring because that is when instructional coaching begins. Mentor training also includes an extensive segment on the techniques and skills required for a successful conference. The conference format is structured to increase the opportunity for resident input and to facilitate self-analysis.

Continuous program refinement. After formal observations in the fall and spring, the mentor returns a summary of the resident's performance to the Residency Project COE Office. This summary is analyzed by district, providing information that is especially useful in the preparation of specific staff development programs for cooperating school districts. Further, additional sources of data help us evaluate the effectiveness of the Professional Teacher Preparation Program.

Collaboration and the Professional Teacher Preparation Assessment System

Nothing seems to tax the spirit and process of collaboration more than the prospect of a pending assessment or evaluation. Given the ultimate responsibilities of teachers, there are many reasons for using a collaborative process to align the curriculum, instruction, and assessment of teacher preparation programs.

In 1986, the COE initiated the development of the Teacher Preparation Assessment System (TPAS). A literature review was conducted to identify competencies expected of beginning teachers. In addition, COE faculty and various elementary and secondary public school educators were asked to express their thoughts on competencies of beginning teachers. Three major concerns were discussed by the educators. First, should teaching be competency based? Second, if teaching should be competency based, what are the beginning teacher competencies? Third, how should beginning teachers be assessed?

Should teaching be competency based? In 1986, there was much disagreement among faculty about the view of teaching as a competency based endeavor. Although faculty and practitioners seemed to agree that teaching was part science and part art, they were concerned about which competencies could be acquired through traditional course work, which ones required varying degrees of experience, and which ones required some type of "gestalt" of teaching. After much debate, the college supported the development of a prototype list of beginning

teacher competencies (Noggle, 1987), but strongly specified that the total assessment system would need to consider multiple lines of evidence in addition to TPAS examination results.

What are the beginning teacher competencies? Although the literature included many different lists and ideas about teaching or teacher competencies, it was quite lacking in regard to the level of beginning teacher performance. Numerous discussions with faculty and public school educators were very helpful and yielded three general ideas about beginning competencies. First, many competencies expected of beginning teachers are the same as those expected of experienced teachers, but the competencies are expected to be more developed in an experienced teacher. Second, classroom management and discipline, as well as knowledge of subject matter, laws, and policies affecting education, are basic to survival. Third, beginning teachers should be skilled in a number of instructional approaches rather than a single approach.

(The panel presentation featured a detailed description of the development of the assessment instrument.)

Increasing Collaboration

In summary, as the new program has evolved, collaboration has increased within the COE and among university faculty, public school teachers, state agencies, and the corporate world.

In essence, we believe providing the highest quality of education will require committed entities with vested interests, working in unison toward that goal. An excellent teacher education is essential to ensure that teachers are prepared to meet the demands of teaching in the 21st century.

References

American Association of Colleges for Teacher Education. (1983). *Educating a profession: Profile of a beginning teacher.* Washington, DC: Author.

Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39,* 38-42.

Association of Teacher Educators. (1986). *Visions of reform: Implications for the education profession.* (Report of the ATE Blue Ribbon Task Force). Reston, VA: Author.

Berliner, D. C. (1989, August). *Expert knowledge in the pedagogical domain.* Paper presented at the meeting of the American Psychological Association, New Orleans, LA.

Boyer, E. (1983). *High school: A report on secondary education in America.* (Report sponsored by the Carnegie Foundation for the Advancement of Teaching). Cambridge: Harper and Row.

Carnegie Task Force on Teaching as a Profession. (1986). *A nation prepared: Teachers for the 21st century.* New York: Carnegie Foundation.

Cohen, M.M. & Gillman, V.C. (1988). Supervision: A developmental approach for fostering inquiry in preservice teacher education. *Journal of Teacher Education, 39*(2), 2-8.

Commission on Teacher Assessment of the Association of Teacher Educators. (1988). *Teacher assessment.* Reston, VA: Association of Teacher Educators.

Corrigan, D. C. (1982). Curriculum issues in the preparation of teachers. In D. C. Corrigan, D. J. Palmer, and P. A. Alexander (Eds.) *The future of teacher education: Needed research and practice* (pp. 37-47). College Station: Texas A & M University.

Danzig, A. (1986). *Arizona Teacher Proficiency Examination.* Phoenix, AZ: Arizona Department of Education.

Education Commission of the States. (1986). *Transforming the State role in undergraduate education.* Denver: Author.

Engelhardt, J. (1985). New teacher education program proposed. *College of Education Newsletter, 12*(2), 1-3.

Enz, B. J., & Anderson, G. W. (1989). *What should mentors do? Mentors' and residents' perspectives.* Manuscript submitted for publication.

Gideonse, H. D. (1986). Guiding images for teaching and teacher education. In T. J. Lasley (Ed.), *The dynamics of change in teacher education* (pp. 187-197). Washington, DC: American Association of Colleges for Teacher Education.

Haberman, M., & Collins, J. (1988). The future of the teaching profession. In J. Sikula (Ed.), *Action in teacher education* (pp. 219-225). Reston, VA: Association of Teacher Educators.

Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group.* East Lansing, MI: Author.

Huling-Austin, L. (1987). Teacher induction. In D. M. Brooks (Ed.), *Teacher induction: A new beginning* (pp. 3-23). 23). Reston, VA: Association of Teacher Educators.

Lanier, J. E. (1982). Curriculum issues in the preparation of teachers. In D. C. Corrigan, D. J. Palmer, and P. A. Alexander (Eds.), *The future of teacher education: needed research and practice* (pp. 13-35). College Station: Texas A & M University.

Lasley, T. J. (1986). Teacher induction: Programs and research [Special issue]. *Journal of Teacher Education, 37*(1).

Lopez, C. L. & Noggle, N. L. (1988, April). *Teacher and administrator rating of SPELL's beginning teacher competencies.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

McDaniel, E. (1988). Collaboration for what? Sharpening the focus. *Action in Teacher Education, 10*(4), 1-8.

National Association of State Directors of Teacher Education and Certification. (1986). *Standards for state approval of teacher education.* Salt Lake City: Author.

National Commission on Excellence in Education. (1983). *A Nation at risk: The imperative for education reform.* Washington, DC: U.S. Department of Education.

National Council for Accreditation of Teacher Education. (1986). *Standards, procedures, policies for the accreditation of professional teacher education units.* Washington, DC: Author.

National Curriculum Committee of The Holmes Group. (1989). Curriculum committee's beliefs about schooling generate principles for teacher education curriculum. *The Holmes Group Forum, 3*(2), 1-2.

National Education Association. (1984). *Report of the committee of ten on secondary school studies.* New York: American Book Company.

National Governors' Association. (1986). *Time for results: The governors' 1991 report on education.* Washington, DC: Author.

Noggle, N. L. (1989). *TPAS development report.* Tempe: Arizona State University, College of Education.

Noggle, N. L. (1987). *Domains, areas, objectives, measurement alternatives for the Teacher-Preparation Assessment System.* Tempe: Arizona State University, College of Education.

Odell, S. J. (1986). Induction support of new teachers: A functional approach. *Journal of Teacher Education, 37*(1), 26-29.

Robinson, S. (1982). *Preparation for teaching: Making it relevant.* Washington, DC: National Education Association.

Rosenfeld, M., Thornton, R. F., & Skurnick, L. S. (1986). *Analysis of the professional functions of teachers.* Princeton, NJ: Educational Testing Service.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57,* 1-22.

Smith, S. D., & Auger, K. (1985-1986). Conflict or cooperation? Keys to success in teacher education. In J. Sikula (Ed.), *Action in Teacher Education, 7*(4), 1-9.

Toffler, A. (1970). *Future shock.* New York: Bantam Books

Developing a National Database for Preservice Teacher Education Follow-up Studies

William E. Loadman
Susan M. Brookhart
The Ohio State University

Donald J. Freeman
Michigan State University

The National Database for Teacher Education Follow-up Studies described in this paper is presently in the early stages of preparation and implementation. Work is proceeding on instrument development, issue definition and policy formulation, and institutional coordination. This paper reports the status of work on the creation, use, and maintenance of a national database for teacher education follow-up information.

The development of a National Database for Teacher Education Follow-up Studies (National Database) raises several issues. The purpose of this paper is to explore these issues, organized under the following questions. 1) What is the National Database? Issues addressed by asking this question include statements of purpose and intent as well as simple definition. Achieving certain goals was the reason for the inception of the National Database project. What are these goals, and how can they be served? This question also encompasses the issues of what kinds of reports will be prepared and presented for the use of National Database follow-up information. 2) What are the nature and quality of the common follow-up instrument proposed for the National Database? Issues in instrumentation include what content was included in the questionnaire and how content decisions were made. Descriptions of the processes used for instrument development and pilot testing and a presentation of pilot test results will enlighten these issues and also address the issues of reliability, content validity, and construct validity. 3) What is the nature of institutional participation in the National Database? Under this question, issues of institutional rights and responsibilities and confidentiality of information are discussed.

I. What is the National Database?

Definition

The National Database for Teacher Education Follow-up Studies will be a computer database comprised of individual responses, grouped by institution, to routine follow-up surveys done by teacher preparation institutions. Such follow-

up is done by individual institutions already, in part to satisfy accreditation requirements and in part to provide data for program evaluation. The National Database will contain responses to common items presented to graduates of different institutions through the use of a common survey instrument. Participating institutions will use the common instrument in their teacher education program follow-up.

The National Database will also contain information about the follow-up studies themselves. The name of the institution; type of program or programs, including graduate or undergraduate status; approximate number of program graduates each year; sampling plan and follow-up sampling plan; number of surveys sent and date of mailing; response rate; and graduation years represented will be on the computer database and supported with appropriate paperwork. The National Database will be physically contained at the computer center of one of the participating universities.

At present, evaluators from ten institutions are working on some aspect of the National Database project. If they were joined by others, so that data from 40 or 50 different institutional follow-ups were added and analyzed each year, with reports to be generated accordingly, the National Database would require formal staffing.

The National Database for Teacher Education Follow-up Studies, then, is defined by the following characteristics. It will be a repository for individual and institutional responses to a common teacher education program follow-up instrument used by a group of participating teacher education institutions. It will be comprised of data stored on computer tapes and supported by appropriate personnel and paperwork.

Purpose

The general goal for the National Database is to provide a multi-institutional database of information about recent graduates of preservice teacher education programs. Under this general goal, four purposes are served.

First, national information will allow more insightful interpretation of follow-up results at each institution. At present, each institution which surveys its graduates uses its own questionnaire. Interpretations of responses to these surveys are institutionally bound. Comparisons can be made to previous surveys from the same institution, but only relative reference points are possible. Without norms, no anchor points can be established. The generation of national norms would allow conclusions which were more useful for program judgments. The university could say, for example, that 75% of its graduates reported being well prepared to

teach, and that this put them in the top 25% among comparable institutions regarding this question; they might then conclude that in the views of their recent graduates, no major program changes were needed.

A second purpose for the National Database is to allow a description of recent graduates of teacher preparation programs nationwide. Current follow-up procedures do not allow a cross-institutional profile of the results of the programs which prepare the nation's teachers.

A third purpose is constructing institutional norms for use in research and development. Norms will be useful in interpreting institutional data as described above. They will also be helpful in understanding and, ultimately, improving the process of teacher education. Normative data will add empirical evidence to discussions about the future of professional teacher preparation.

A fourth purpose for the National Database is its utility in the accreditation process. Data for accreditation could be better interpreted if national norms were available. In addition, the National Database could, if used routinely, become an efficient source of accreditation data, which could be provided to agencies such as the National Council for Accreditation of Teacher Education (NCATE) or the National Association of State Directors of Teacher Education Certification (NASDTEC) to assist them in developing and enforcing standards.

Reporting Methods

Each participating institution will submit data collected in teacher education follow-up studies by using the National Database common instrument. Standard reports of results will be provided to each institution submitting data. A report, by item, of means for scaled items and frequencies for multiple-choice items will be sent to the institution submitting the data. The format of the report will be a labeled and annotated computer printout. The National Database will receive submissions at any time during the year, but standard reports will be sent after the completion of each academic year. In this way, appropriate norms can be included with the institutional summary reports.

A copy of norms based on responses from the current academic year and the immediately preceding one will be sent with each institution's standard report, so that the institution can better interpret its results. Thus the National Database office will produce two kinds of summary reports: institutional and normative.

Reporting methods will include the use of standard statistical packages at first. As the National Database grows in size, a more efficient method would be to write a computer program for the project so that a tailored report printout could be obtained routinely by National Database office staff.

Normative Data

The norms for each year will provide information about the distributions of responses from teacher education program follow-up studies across institutions. Each year's norms will be calculated from the data submitted that academic year and the immediately preceding one. This two-year base will yield more stable norms than would a one-year base, but it would not require aggregating data collected at very disparate time periods. Institutional norms, based on distributions of institutional summary statistics, will be constructed.

For scaled items, the distribution of institutional means will be reported in the form of percentile ranks. Distribution information will aid interpretation of institutional results.

For multiple choice items, distributions of institutional response percentages will be reported in the form of percentile ranks. For example, one item in the common instrument reads, "Do you regret you are not teaching?" The choices are "Yes" and "No." An institutional summary report might show that 75% of its graduates who were not teaching regretted not teaching. Normative information might show that this figure corresponded to the 53rd percentile for participating institutions. The institution could then conclude that its graduates' overall response to this question was near the median for all participating institutions.

Normative data will aid institutions in interpreting and using the results of their own follow-up studies. Participating institutions will receive normative data with their institutional summary reports each year they submit follow-up responses. Participating institutions could request normative data for other years; for example, norms for the year in between a two-year survey cycle might be of interest to a participating institution.

Evaluation

The National Database will keep records of its own operations in the form of annual reports for each academic year. The director will send these annual reports to the members of the National Database steering committee and make the reports available to any participating institution upon request. Annual reports will also be available to any agency, non-participating institution, or individual upon request and with the approval of the steering committee.

Annual reports will include the following: 1) basic personnel and budget information, 2) names of institutions submitting data that year, along with sample sizes and response rates for each, 3) names of institutions receiving institutional summary reports, and 4) summaries of other information provided.

II. What is the nature and quality of the National Database follow-up instrument?

Instrument Development

Follow-up surveys of graduates are the most common method of teacher education program evaluation (used by more than 75%) (Ayers, 1979). At present, institutions rely on their own survey instruments when conducting follow-up studies. As the first step in designing an interinstitutional questionnaire to gather information for the National Database, Donald Freeman and Mary Kennedy from Michigan State University and William Loadman from The Ohio State University convened a group of evaluators from ten teacher education institutions to work on this task. In response to the directives of this group, Freeman prepared a compendium of follow-up items by analyzing follow-up surveys used at 18 institutions, collating and editing items from these surveys, and developing new questions to address deficiencies suggested by this review. The resulting compendium of items is available from the National Center for Research on Teacher Education at Michigan State University (Freeman, 1988).

Next, Freeman and Kennedy selected a subsample of items from the compendium to serve as a draft of the interinstitutional survey instrument for the National Database. The national panel reviewed and critiqued this draft, and Freeman and Loadman used this information to create the pilot test version of the instrument. The panel review considered issues of length and content validity (see Novick, 1985) as well as the clarity of each item. Pilot testing of this instrument occurred at The Ohio State University (OSU) in May 1988, at Tennessee Technological University in September 1988, and will take place in other institutions this year. A copy of this instrument is available from William Loadman at The Ohio State University.

Items on the instrument cover six areas. The survey requests the following kinds of information: 1) employment history, including characteristics of employment for both those in teaching and those currently not teaching, 2) ratings of preservice program quality, 3) ratings of knowledge and understanding of teacher education program content, 4) ratings of the adequacy and source of development of component teaching skills, 5) demographic and other background information, and 6) perceptions of the goals and responsibilities of teachers. In addition, an optional item requests permission to contact respondents' immediate supervisors for an evaluation of work performance that is directly related to the teacher preparation program.

Pilot Test Results. (The authors provided a lengthy description of the pilot testing procedures which is excerpted here.)

Sample. The pilot test at The Ohio State University occurred in May 1988, with a follow-up mailing in June. The instrument was sent to 1,830 graduates of baccalaureate teacher preparation. This group was the entire population of baccalaureate teacher education graduates from academic years 1984-85, 1985-86, and 1986-87. One follow-up mailing was done. Seven hundred sixty surveys were returned, for a return rate of 42%. This compares with the usual return rate for baccalaureate teacher preparation follow-up at Ohio State. The previous follow-up survey, done in 1985, also covered three graduation years. Its return rate was 40% (Loadman, Steele, & Brookhart, 1986).

General Results. The pilot test of the instrument was very successful. On the basis of the pilot information, the instrument was revised, sent to the national committee for another round of feedback in November 1988, and revised again. The most recent draft of the pilot instrument is now available and it is anticipated that this version will be used in pilot studies conducted in 1989.

As a result of the pilot effort, the following steps were taken to improve the instrument. The directions were modified to make the respondent's task less complex and easier; page formatting was revised to improve aesthetic quality while at the same time making the items directly compatible with optical scanning capability; several items were revised to make them more clear and shorter; several items were providing redundant information and the stronger of these items were retained while the weaker items were dropped; items which functioned poorly were dropped, making sure that content validity was not sacrificed; a few items were added to augment content validity; minor problems in branching of respondents was discovered and corrected; a few items were merged into more general items; and, where appropriate, subscale reliability was established.

Conclusions. The pilot instrument succeeded in collecting data from 42% of the target population. This figure will probably rise with the revision and streamlining of the instrument. Recommendations were made to eliminate one of the item formats, to make directions more explicit, and to space out the design so that the instrument would be more visually inviting. The project group developed a revised version of the pilot instrument for field testing (version 1/89).

The final draft of the pilot instrument, with item content and format improved based on both the OSU data and committee feedback, will be piloted again. In general, though, the items seemed to function well. Item responses made sense and were consistent with other parts of the instrument and with other literature. The pilot test of the common follow-up instrument did collect useful, interpretable teacher education program follow-up information.

III. What is the nature of institutional participation in the National Database?

The National Database will be the collective property of the institutions which contribute to it. At present, ownership of the idea and responsibility for its implementation rest with the committee of evaluators who are working on the project. In the future, when real data are pooled into a National Database, control over that information will be administered by a steering committee of five or more individuals who represent the institutions which use the national follow-up instrument and the National Database. Initially, this group will meet regularly or as needed, typically at a national conference, to consider proposals to conduct analyses of data across some or all institutions. Standard procedures for adding or accessing information should eventually become routine and would not require committee action. Routine procedures will be documented in *User Guidelines* prepared for use with the follow-up instrument.

Guidelines for Participation in the National Database

Participation is by institution, not by individuals. The follow-up survey is designed for program evaluation at the institutional level. An individual faculty member, for example, should not undertake to survey a sample of his or her own students for use in the database. Institutional participation in the National Database is now and shall always remain open to any institutions that wish to join. A letter of commitment from the dean of the institution will be the only requirement for admission.

Responsibilities for Data Collection and Processing

Participation in the National Database involves the following responsibilities. The institution will bear the cost of the follow-up survey, including printing, mailing, data processing, and secretarial assistance. The institution may modify the follow-up survey by adding its own items to collect any special information it needs. Institutions are encouraged, however, to use the existing items on the instrument so that comparable data are available across institutions. Any deviations from this procedure should be carefully noted in the materials submitted to the National Database. Participating institutions are also strongly encouraged to present the items in the order in which they occur on the national survey. Institutions should add their own items at the end of the survey, not intermixed with national survey items, to facilitate data processing. Participants are encouraged to maintain their own local data files as a backup to the National Database.

Participant institutions are responsible for submitting data to the National Database at the host institution in a standard form and will have computer access to their own data, including data from previous years' surveys, at any time. Participant institutions will receive a report from the National Database, with their own results and national norms based on the available data from participant institutions, for each data submission. Thus the results of each follow-up study submitted to the National Database will be reported to the original institution. The cost of preparing these reports in standard form will be part of the budget for the regular maintenance of the National Database.

Institutions are encouraged to use the standard reports for their own program evaluation, for documentation for accreditation review, and as input for collaborative cross-institutional work. Participant institutions are encouraged to do their follow-up surveys at regular intervals. Whether follow-up is done yearly or every two or three years will differ by institution, but participants are encouraged to be consistent. The National Database would thus eventually be a source of useful longitudinal information.

Guidelines for Submission of Data . (Here the authors present a detailed description of the institutional data collection responsibilities. This information is available from the authors at Ohio State University.)

Confidentiality and Access to Information

Individual Information. The National Database will not keep individual records. It will not be possible for anyone to identify individual respondents by name or by social security number. Thus, participating institutions which want this information will have to rely on their own local databases. Personal information will be purged before data submission. This makes the question of confidentiality for individual information moot. Individual follow-up responses will be labeled by a code number so that supervisors' follow-up responses may be matched with them. Each participating institution will accomplish the matching of graduates' and supervisors' code numbers before data are submitted.

Institutional Information. Data sets of individual responses and summary reports particular to an institution will be confidential. This information will be provided only to the institution. Staff will release data to other institutions, researchers, or accrediting agencies if and only if they receive a written request or written permission from the institution. Staff will notify the member institution of its intent to release this information at least one week prior to doing so. Computer access to data could also be provided using a similar access procedure. The cost of providing this information could be billed to the requesting party or university.

The policy of institutional permission allows institutions to decide for themselves who may use their information. It is anticipated that once the National Database begins functioning routinely, institutions will find permitting access to follow-up information is the most efficient way to submit required information to accrediting agencies. It is also anticipated that many worthy research and program evaluation purposes will be served by allowing access to institutional data. The National Database access-by-permission policy reserves for each institution the right to decide whose purposes it deems worthy.

Cross-institutional Information

A request for cross-institutional data for research purposes requires committee approval plus the permission of the institutions for which data are sought. Confidentiality of institutional information for secondary analyses is the joint responsibility of the five member oversight committee and the institutions concerned. Proposals for research using cross-institutional data would be sent to the National Database office and reviewed by the steering committee. If the committee accepted the proposal, it would send a letter of recommendation and request for permission to the institutions involved. Individual institutions would then grant permission for their data to be used as proposed. If an institution did not do so, the committee would check with the researcher to see whether the remaining data were still useful for his or her purposes.

The aim of this access policy is confidentiality, not secrecy. The National Database encourages thoughtful research and evaluation uses of data. The purposes of having national data available are better served when the data are used in these ways. The National Database policy of open access to normative data and access by permission to data from specific institutions is meant to reserve ultimate ownership and control of data for the institutions that provided the data.

Conclusions

Work on the National Database for Teacher Education Follow-up continues in meetings at national conferences, including the annual meeting of the American Educational Research Association. The issues of definition and purpose discussed in this paper under question one have been fairly well resolved. The National Database definition and purpose as stated in this paper are the bases on which further work has proceeded. The instrumentation issues discussed under question two are the focus of active work at the present time. Instrument pilot testing and analysis will continue in 1989, and instrument revision will be

undertaken accordingly. Work will begin soon on 1) the final version of the survey instrument, to be used for the next three to five years, 2) an abbreviated version of the instrument, and 3) a version for graduates of post-baccalaureate programs. The institutional participation issues presented under question three are still in the discussion phase. It is anticipated that the National Database will come into physical existence this year, as several institutions send data to the office at The Ohio State University.

Interested persons from any institution that does teacher education program follow-up are invited to contact William Loadman at The Ohio State University. The National Database Committee seeks to broaden the base of institutions involved in the National Database project.

References

Ayers, J. B. (1979, April). *Follow-up studies: Providing the thrust for program improvement.* San Francisco: Paper presented at the Annual Meeting of the American Educational Research Association.

Freeman, D. J. (1988). *Compendium of items for follow-up surveys of teacher education programs.* (Technical Series 88-1). East Lansing: Michigan State University, National Center for Research on Teacher Education.

Houston, W. R., & Newman, K. K. (1982). Teacher education programs. In H. E. Mitzel (Ed.), *Encyclopedia of educational research, fifth edition,* pp. 1881-1893. New York: The Free Press.

Loadman, W. E., Brookhart, S. M., & Arora, N. (1989). *Technical report #11: Follow-up of the 1984-85, 1985-86, and 1986-87 graduates of the College of Education.* Columbus: The Ohio State University.

Loadman, W. E., Steele, L. L., & Brookhart, S. M. (1986). *Technical report #10: Follow-up of the 1980-81, 1982-83, and 1983-84 graduates of the College of Education.* Columbus: The Ohio State University.

Lortie, D. C. (1975). *Schoolteacher.* Chicago: University of Chicago Press.

Novick, M. R., Chair, Committee to Develop Standards for Educational and Psychological Testing of The American Educational Research Association, The American Psychological Association, and The National Council on Measurement in Education. (1985). *Standards for educational and psychological testing.* Washington: American Psychological Association.

Stern, J. D., & Chandler, M. O., Eds. (1987). *The condition of education: 1987 edition.* Washington: Center for Education Statistics.

Stone, B. A. (1987). Learning to teach: Improving teacher education. *Childhood education, 63,* 370-376.

Project Linkage: School/University Collaboration in the Development of a Masters Degree Program for Inner City Teachers

Malcolm Friedman
Long Island University

The educational reform movement of the 1980s is exemplified in two most significant reports, *A Nation Prepared: Teachers for the 21st century*, and *Tomorrow's teachers,* (A report of the Holmes Group). Each makes reference to the need for significant changes in that schools will function and discuss the vital area of teacher preparation. The Carnegie Commission states that "real reform cannot be accomplished despite teachers. It will only come with their active participation." The Holmes group cites, as an important goal, the connection of higher education institutions to schools. Further, the group states that if university faculties are to become more expert educators of teachers, they must make use of expert teachers in the education of teachers.

Both of the statements cited above speak to the issue of teacher empowerment, another strong force on the 1980s educational scene. These observations of the reform movement provide an opportunity for us to rethink traditional inservice preparation programs and to reflect upon how innovative school/university collaboratives can reshape the ways that teachers strengthen their skills. The purpose of this paper is to provide some overall considerations which need to be addressed prior to entering into a collaborative, to describe a model collaborative project, and to share some preliminary findings as gathered from project participants in the District 13/Long Island University Project Linkage.

Basic Considerations for Partnerships

Before embarking upon a program of school/university collaboration, a number of basic questions must be answered at the university and school district level as indicated below.

1. Is the university willing to extend its offerings off campus?
2. Has the university worked previously with school districts so that a collaborative is a natural outgrowth of past efforts?
3. Can decisions as to implementation be made quickly at the university level? (Nothing turns a practicing educator off more than administrative foot dragging.)
4. Is the university willing to enter into a teaching partnership utilizing faculty as well as qualified practitioners in the field?
5. Will the district provide space for course offerings?

6. Is faculty willing to enter into "curriculum negotiations?" The point here is an openness to build course content to include topics that reflect specific school district needs and philosophy.
7. Does the university have someone on staff who is comfortable working with superintendents, principals, and teachers, and if possible, a "past practitioner?"
8. Can scheduling of courses be flexible to meet teacher's needs? For example, if 30 contact hours are required for a three-credit course, do we have the option to plan 30 two-hour sessions, 10 three-hour sessions or plan course offerings for weekends?
9. Is faculty willing to teach at off-campus sites and understand that collaborative programs strengthen community/university relationships?
10. Will curriculum, although modified by field considerations, contain the latest research on teaching and learning, giving participants the theoretical base for good practice?
11. Is the collaboration based upon an assessment of school district needs? For example, are there many newly assigned teachers who need to complete additional course work, or what specific areas of curriculum does the school district want to strengthen?

If there is consensus in regard to the answers to these and many more questions, there is a basis upon which a school district/university partnership can be built.

Description of University and School District

Prior to embarking upon a description of Project Linkage, it would be of value to provide an overview of the two collaborative institutions.

Long Island University

The Brooklyn Campus of Long Island University (LIU) is an urban complex in the heart of downtown Brooklyn. The faculty seeks to provide a well-rounded education for inner city youth and inservice teachers who, in most instances, must work while pursuing their education. The needs of the urban, inner city students are unique and require an institution with leadership and vision about their place in the world. Many urban youth come to LIU seeking careers in teaching.

The specific mission of the School of Education is to prepare excellent teachers for the schools in the New York City area. Most of our undergraduate students are from the local schools and our graduate students are employed in the 13 districts that surround the university, as well as in districts far from our campus.

We work closely with the districts to discern personnel needs and services that will assist them in teaching the children of New York City.

At the Brooklyn campus of Long Island University, an important tradition of the School of Education is singular dedication to the educational needs of students of many ethnic backgrounds, cultures, and interests. Our faculty is sensitive to the needs of the multiethnic population that we serve. Since programs are individualized and classes are small, we ensure a good faculty-student ratio and continuous dialogue between faculty and students. Students tell us that they are pleased to find faculty available to talk to them about their individual problems.

Our mission includes helping to develop Brooklyn and to make it a more desirable place to live and work. We are actively involved in the cultural renaissance that is now taking place in the borough.

Community School District

This district is representative of most urban school districts. Its residential areas are ethnically and economically diverse. Approximately 80% of the school population is Black, another 18% is Hispanic, and not more than 2% is White. The district provides an education program for approximately 15,500 pupils in grades K-9. There are 18 elementary schools, 17 of which qualify for Chapter One funds.

Rogers and Chung (1983) characterized Community School District 13 as one of the most effective districts in New York City. Between 1974 and 1985, the percentage of students in the district who were reading on or above grade level was 22.1 (1974), 22.9 (1975), 36.8 (1976), 36.0 (1977), 31.7 (1978), 29.8 (1979), 41.0 (1980), 46.6 (1981), 47.5 (1982), 56.7 (1983), 55.5 (1984), and 58.9 (1985). Between 1981 and 1985, the percentage of students in the district that scored on or above grade-level on the city-wide mathematics test was 43.9 (1981), 50.3 (1982). 56.3 (1983), 61.5 (1984), and 61.6 (1985). (The city-wide mathematics test was not administered to all grades prior to 1981.)

Building a tradition of excellence is an insistent theme in Community District 13. This theme does not reflect an unrealistic desire to be perfect, or almost perfect in all that is done. Rather, this theme persistently acknowledges the long-range goal:

To continually get better in all that is done in order to become the first urban school district where every school is instructionally effective for poor and minority students. The mottos, "When you cease getting better, you stop being good" and "Good is not good where better is expected," are constant reminders that the district can, ought to, must, and will accomplish this goal.

Our goals also lead us out, from the universities in which intending teachers study, to the schools in which they must practice. We have become convinced that university officials and professors must join with schools, and with the teacher organizations and state and local school governments that shape the schools, to change the teaching profession. Schools no less than universities are places in which teachers learn (Holmes Group, p. 3-4).

A personnel review conducted in October, 1985, in Community School District 13, Brooklyn, indicated that there were approximately 145 newly assigned teachers. In addition, numerous teachers were relatively new, working as temporary per diem substitutes on long-term assignment.

An analysis of this information revealed a need for a program of graduate study for those teachers. Long Island University had previously indicated a commitment to work with Community School District 13 on programs of mutual benefit for both the university and the school district.

Instructor magazine recently conducted and published the result of a *Beginning Teacher Survey* of those teachers planning to continue teaching next year. The factor cited most frequently as the most important reason for selecting teaching as a career was that the "school system allows for professional growth." The project described addresses this need. The teachers in the collaborative program would be actively involved in their studies. They will have the benefit of being assisted by both college faculty and district administrators.

During Fall 1985, preliminary meetings were held at LIU to discuss the possibility of offering a Master of Science in Elementary Education at an off-campus site in Community School District 13. The plan was to offer a customized program of teacher education at the graduate level as a collaborative undertaking between the school district and the university. An underlying premise was that the curriculum would meet the needs of working educators and would reinforce the philosophy, goals, and objectives of Community School District 13.

A needs assessment was carried out in District 13 and more than 35 teachers assigned to elementary schools demonstrated an interest in participation. As a result, an orientation meeting was held with staff on June 17, 1986, to describe elements of the proposed program.

It should be noted that the collaborative described in this paper is only one of many possible models, ranging from simple to complex. A school district/ university partnership may involve cooperation in:

1) Offering specific courses to meet district needs

2) Providing consultant service to districts for program development

3) Planning conferences on topics of mutual interest
4) Developing joint grants for funding
5) Development of on-campus talented and gifted programs
6) Utilization of university facilities for district students
7) Providing advanced placement courses for high school students
8) Joint sponsorship of on-campus alternative schools

It is important to identify needs and resources available. This information assists in selecting the right collaborative project.

Project Goals

Consultation with school district staff resulted in the establishment of the following project goals:

1) To create a linkage between a school of education located in an urban center and a public school district.

2) To provide a model based upon the collaborative effort which can be adapted by other universities and school systems throughout the United States

3) To develop a sense of commitment to the profession and the school district as a consequence of active participation in the program

4) To enhance teachers' sense of power as a result of participating in the development of a Masters Program

5) To combat teacher isolation by providing a setting where teachers can share positive experience and learn how to overcome classroom related problems

Project Design

The District 13's Director of Elementary Curriculum and Instruction and the Assistant Dean of the School of Education, Long Island University, reviewed the present curriculum for the MS in Education Program in Early Childhood and Elementary Education.

A specific sequence of courses was designed to ensure that participants moved through the program in a sequential manner. Participants would move as a cohort through the program and with the expectation that they make a commitment to complete the program and teach in District 13. Course work was followed by intervisitation opportunities for participants, so that teachers had an opportunity to view ideas in practice and would feel less isolated. Also, classes were conducted both off-campus in District 13 and on campus, at times convenient for teacher participants. Course instructors were selected by university and district personnel

from regular faculty members in the School of Education of Long Island University and selected adjunct personnel from Community School District 13 and Central Board of Education offices. District and university staff met on a continual basis to evaluate and modify program curriculum, as necessary. Input was solicited from project participants.

Course Sequence for the MS in Elementary Education

It was indicated, in the previous section of this paper, that participants would move as a cohort through the program. The students would not be able to select courses at random. The rationale for this approach was based on the desire to provide students with an apperceptive base of knowledge which would help them in succeeding courses. For example, since each course would focus on recent research in the field, it was felt that Education 601 (Analyzing Educational Research) would be a good beginning course since it would assist participants in the analysis of research in content courses that would follow. The sequence of courses is listed below included child development, urban education, reading instruction, computers, special education, critical thinking, and some curriculum and instruction courses in academic areas.

During the second year of the project, Fall 1987, an inventory instrument was administered to program participants. The total responses numbered 20. According to this instrument, 35% of respondents were satisfied and 65% were somewhat satisfied with courses taken in the program. No respondent indicated dissatisfaction. Within the evaluation, participants were asked to quantitatively rate their confidence levels in regard to their ability to do graduate work. They were also asked to respond concerning their confidence regarding teaching ability as compared to their level of confidence at the start of the program. Fifty-five percent of the respondents felt that the program enhanced their ability to do graduate work. Of this, 75% noted that they felt more confident in their teaching performance as a result of program participation.

The respondents were asked to rate the value of the courses which emphasized methods: 50% responded that the courses were worthwhile and 49% felt that the courses were somewhat worthwhile for them as classroom teachers. Only one respondent indicated that one course was not worthwhile. When asked if, as a result of participating in the program, respondents grew professionally, 75% of the participants responded that they had indeed benefitted. It should be noted that no respondents rated any criterion at the below-average level.

Results gathered from the administration of the inventory instrument provide some interesting conclusions in regard to how program participants view the

collaborative project. Of particular interest is that most respondents indicated:

Overall program satisfaction

Increased confidence in their ability to do graduate work

Increased confidence in their ability to perform as teachers

That course work improved their performance as teachers

While the sample is small, it is encouraging to note the positive nature of the participants' responses.

Other considerations

Collaborations with local educational agencies are exciting ventures. They bring renewed vitality to the university community. However, certain cautions should be pointed out to those who embark on collaborative projects. For one, courses offered at off-site locations must contain content at the graduate level. They cannot be "watered down" inservice offerings. Also, standards for staffing must be maintained to ensure that students are receiving quality instruction. In essence, quality control must be maintained.

Access must be guaranteed to students. Course schedules must reflect the same student contact hours as on-campus. Library facilities must be provided, on campus, to ensure that students are given adequate research sources. Provision must also be made for the exceptional student who cannot complete the course sequence in order.

Finally, visitation and review to include ongoing evaluation must be built into the program. The success of any collaborative effort is dependent upon the sense of commitment of the collaborators. This, in summary, is the most important factor to be considered by potential collaborators.

References

A Nation Prepared: Teachers for the 21st century. The report of the Task Force on Teaching as a Profession. Carnegie Forum on Education, 1986.

Tomorrow's teachers: A report of the Holmes Group. 1986.

Collaboration and Reflectivity: Cornerstones of a Teacher Education Program

Nancy L. Quisenberry
John McIntyre
Southern Illinois University at Carbondale

David M. Byrd
*University of Rhode Island**

Collaboration and reflective teaching have become the cornerstones of the teacher education program at Southern Illinois University at Carbondale (SIUC). Each anchors the foundation of the program and serves as a guide for all decisions that impact on the curriculum. Historically, SIUC has been involved in collaborative efforts with local schools for decades. The movement toward reflective teaching, however, has emerged within the last decade as a result of recent research and of feedback from local cooperating teachers.

SIUC's College of Education has been at the forefront of university/school collaboration for teacher education for the past 15 years. At SIUC, this began with a "block" program for elementary majors in two school systems. Students were placed in the schools for two levels of student teaching experiences prior to student teaching. These experiences were "blocked" with specific major courses. The success of this program led to the complete reorganization of the Teacher Education Program for all majors seeking initial classroom certification at SIUC in the early 1970s.

In 1974, SIUC implemented Professional Education Centers in 15 locations, most of which were in school districts in southern Illinois. Initially, the Syracuse University Teacher Center model (Collins, 1974) was considered for adoption but needed to be modified to become more adaptable to the southern Illinois area. In contrast to SIUC, the Syracuse Teacher Centers serve a more dense population of urban and suburban school districts and have a mission that is devoted to both inservice and preservice education. Each center is governed by a coordinating council of university and school representatives. A budget is developed for each of the centers that enables them to sponsor graduate courses and to financially support course work taken by their cooperating teachers. In addition, the Syracuse center coordinators are employees of both the university and school district which enhances the notion of collaboration.

On the other hand, Southern Illinois University at Carbondale serves a more sparsely populated area of mostly rural schools that often experience financial

* Dr. Byrd was a faculty member at Southern Illinois University when the paper was originally written.

difficulty. Still, there is a history and desire for southern Illinois schools to work closely with SIUC. Each SIUC Teacher Education Center is staffed by a full-time faculty member, funded totally by the university, assigned to the center to coordinate and supervise three levels of field experiences, and to act as a liaison between the school district and the university. Although the primary mission of the SIUC centers is the training of preservice teachers, the center coordinators also work with the school district to secure courses, workshops, consultants, and a variety of other services from the university.

SIUC's center coordinators are teacher educators skilled and experienced in instructional supervision and who are responsible for all majors. In this system, the generalist university supervisor is viewed as the specialist in teaching methodology/strategies while the cooperating teacher is viewed as a content specialist. Cooperating teachers are urged to take a course in supervision taught by the center coordinators.

Each center coordinator works with the superintendent and principals in the school district to determine which teachers meet requirements and are available for a given semester. Administrative decisions regarding the assignment of student teachers to the district vary from district to district. On campus, the center coordinators work with the Assistant Coordinator of Professional Education Experiences to match available teachers with prospective student teachers. University faculty give feedback to the Assistant Coordinator of Professional Education Experiences regarding area teachers known to them through graduate classes, professional organizations, workshops, and consultant work in the schools. Student placement involves a cooperative effort from all participants.

The involvement of center coordinators in school district activities varies from center to center. One center coordinator has become a valuable team member of an Educational Service Center (ESC). He helps plan teacher institutes and has provided leadership to a number of district and ESC activities.

Collaboration also takes place in a larger context as classroom teachers and school administrators serve on Teacher Education Program committees, as well as serving on program major advisory committees. Throughout the development of our most recently redesigned curriculum, teachers and administrators who work with our student teachers were involved in the planning.

In April of 1987, the Illinois Blue Ribbon Committee on the Improvement of Teaching as a Profession included, in its recommendations on pedagogical studies, a minimum of one semester of student teaching in an elementary or secondary clinical school. In the discussions preceding this recommendation, SIUC's Professional Education Center model was considered as a model for meeting the "clinical school" expectation.

Fox, et. al, (1986) cite the need for personal, as well as institutional, considerations for effective collaboration. Our experience has shown us that center coordinators should be given the freedom to develop their centers depending upon the needs, available faculty cooperation, and administrative constraints found in each center. As much as possible, this principle is followed in planning student assignments with individual teachers. By the time students have completed the two early field experiences, they are known to at least one and often two center coordinators, as well as the Assistant Coordinator of Professional Education Experiences. An assignment with a cooperating teacher that assures a good match is more likely when both students and teachers are well known to the center coordinator.

Reflective Teaching

Collaborative efforts with schools provide feedback from teachers and administrators about the progress of teacher education students and the ability of a program to meet the needs of these students. Thus, the need to periodically assess the impact of a preservice teacher preparation program on the students in a program is an accepted fact in teacher education. NCATE has for years required the follow-up of graduates with both former students and their employers. However, other means must also be considered to adequately assess the effectiveness of a program.

Realizing this, the Dean of the College of Education (COE) at SIUC appointed a Teacher Education Task Force in Spring 1982 to examine and possibly redesign the undergraduate teacher education core curriculum. The task force represented the major teacher preparation programs in the college; reviewed students' evaluations of the current program, research in teacher education, and the programs of both liberal and comprehensive colleges and universities; and interviewed the faculty coordinators of the teacher education sequence courses in the COE. After much deliberation, the task force presented a redesigned teacher education core curriculum to the dean in October 1983.

The report was accepted by the dean and then by the Teacher Education Advisory Committee--a group comprised of university faculty within and outside the COE and of public school faculty and administrators. A committee was appointed for each of the courses in the redesigned teacher education sequence. These committees were to design the content and details of the courses and included faculty representing all TEP majors and classroom teachers/administrators, to be reviewed periodically by the Teacher Education Advisory Committee which provided additional input during the development stage.

The original Teacher Education Task Force adopted several principles which were intended to guide the committees in the redesign of the courses. Two of the basic principles were 1) that the teacher education courses were to be research and knowledge based and 2) that they were to develop reflective teachers. Thus, SIUC adopted a program model that considers teaching to be a "reflective practice" (Schon, 1983). This program orientation is supported by the writing of other teacher educators.

Wildman and Niles (1987) suggest that preparing the reflective practitioner is a valuable goal that requires a different environment for the preparation process and an intensive effort for its success. In that regard, SIUC's model is similar to Van Manen's (1977) three levels of reflectivity. At the first level, reflectivity focuses on the basic technical skills (instructional and classroom management skills, subject matter content, etc.) required to perform the act of teaching. During the second level, teachers critically analyze the basic rationale for the educational practices being utilized. The third level finds teachers making the connection between what happens in the classroom and the wider social structure, such as a community's moral, ethical, and political principles, that impinges upon a classroom.

Much of the undergraduate teacher program can be placed within Van Manen's first two levels. The majority of the courses focusses on the technical skills and knowledge to be mastered by competent teachers. Unlike traditional-craft program models, however, the inquiry-oriented approach fosters the ability of prospective teachers to critically examine the choices they encounter (such as which strategies to use, which content to teach, etc.) and to analyze the rationale not only for their own teaching practices but also for educational practices in general (Zeichner, 1983).

The task force believed that the initial course in the Teacher Education Preparation (TEP) sequence should 1) have students examine their commitment to teaching in a more intense fashion than the previous course; 2) provide a forum whereby students could discuss schooling and their role in it; 3) introduce students to the "real" world through an early field experience component; and 4) begin the process of developing reflective teachers. EDUC 310 (The Study of Teaching) was developed as the first course in the TEP sequence for students who have been admitted to the program. The course is built around the text, *Field Experiences: A Guide to Reflective Teaching*, by George J. Posner (1985).

The course is taught by the students' teacher education center coordinator so that the university person most knowledgeable of the public school site can best relate to and interpret the students' experiences. During each week of the course, the student has a half-day field experience assignment. These assignments may include some of the following: Walk Around the School, Observation and

Conversation with Students, Conversation with the Teacher, Classroom Map, etc. Each assignment is guided by a set of questions that encourage the students to reflect upon their observations and experiences. Another vital aspect of these assignments are the logs required for each visitation.

While it is the intent that all of the other courses in the professional core builds upon the ground work laid in EDUC 310, the general methods course does so by merging regular lecture/discussion classes with three clinical laboratory experiences. This course, entitled "Organizing and Directing Instruction," introduces microcomputers and software, media production and technology, and microteaching for purposes of skill acquisition in the area of planning and instructional design. The basic model utilized in teaching this course was derived from the work of Donald Cruickshank on reflective teaching and the models of teaching as described by Bruce Joyce. Working with five peers, each student is required to teach two preselected lessons. They are given feedback by their peers and a graduate assistant who is an experienced teacher. Students microteach two more times, once exploring one of the more complex Joyce models and once drawing on content from their own major field of study. In each instance, students are introduced to the knowledge and theory behind an instructional strategy, asked to demonstrate and secure input on their instructional effectiveness, and finally they are required to review a tape of their effort and evaluate their own performance utilizing a prescribed format listing the specific teaching model. The supervisory style utilized by the graduate assistant reinforces the thrust toward producing reflective teachers. Another requirement is to become familiar with the concept of word processing. The use of varied technology to produce teacher generated materials is the goal and evidence of their work is expected to be integrated into their microteaching lessons mentioned earlier.

Student evaluations repeatedly showed that classroom management and discipline was an area of study in which they felt poorly prepared for entering the classroom. The task force recommended that this course become a requirement instead of an elective. Key to this class is an objective that students know and be able to recognize, when observed, the seven approaches to discipline: Redl & Wattenberg, Kounin, Neo-Skinnerian, Ginot, Glasser, Dreikurs, and Canter and Canter. During this course students are in classrooms one-half day per week for twelve weeks. The 21 course objectives clearly call for reflective activity from the students.

Activities are assigned which must be completed in the classrooms. TEP students are directed in their observations of children/youth behaviors as well as teacher/adult behaviors. Some activities require dialogue between the TEP student and the cooperating teacher specifically focussed on the teacher's

reflection on a given situation. Thus students are aided in the development of the reflective process through observation and participation of an experienced teacher's reflective behavior.

When student assignments are reviewed, their understanding of the seven approaches is obvious. They not only reference the observed approach, but discuss the consequences and alternative which could have been utilized. As the semester progresses, their ability to apply the principles of classroom management and discipline become more evident in their class participation and written assignments.

The student teaching component of SIU's teacher education program continues the goals of encouraging collaboration and of producing reflective teachers. SIUC highly values the role of the public school in the preparation of teachers.

Cooperating teachers are consulted continually by the center coordinators about the student teacher's progress. Strategies for improving the student teacher's performance are developed cooperatively and are reinforced by each other to the student teacher. At the mid-term point of the semester, the cooperating teacher and center coordinator conduct a mid-term evaluation of the student teachers, conducted in a manner that encourages student teachers to reflect upon their own performance and to help develop strategies for improvement. The collaborative nature of the student teaching component also is evident during the final evaluation of the student teacher. At this point, the cooperating teacher and center coordinator work together to assign a grade and to jointly write a narrative describing the student teacher's strengths and weaknesses.

Reflectivity is encouraged during student teaching in a variety of ways. First, both the center coordinators and cooperating teachers employ the clinical/instructional supervision model. This model encourages the student teacher to reflect upon their own teaching behavior and to participate in developing strategies for improving it. This approach may occur in a variety of ways, but should result in the student teacher taking an active role in self-evaluation and in their own teacher development. Schon (1987) argued that an essential first step in the development of a reflective teacher is the ability to recognize the elements of competent performance. Second, many center coordinators require that their student teachers write journals that encourage them to reflect upon their experience. Perhaps, the major vehicle for encouraging reflectivity is the atmosphere created by the program and faculty at SIUC. While the student progresses through the program, they are continually being encouraged to reflect about the teaching profession and about their role and performance as a teacher. Hopefully, this environment encourages students to become reflective teachers.

Collaborative efforts are not immune to problems. Lanier (1983) and McDaniel (1988-89) acknowledge that close collaboration can often result in tension emerging between the parties. Rowell (1988) asserts that this is often the result of university faculty not modifying their philosophies or behaviors when working with school districts. However, although tensions may periodically arise, SIUC has found that center coordinators are committed to field-based collaboration with schools and are trained to work with teachers to alleviate tensions and to solve problems.

The redesigned TEP has only recently completed its second year so that evaluation data of the program and our students is limited. One year of valuative feedback has been collected from the 1988-89 student teachers. Certain trends are becoming apparent: 1) student comments concerning the academic rigor of the teacher education program; 2) student logs from EDUC 310 and EDUC 315 reveal that students do seem to become more reflective about themselves and their teaching environment as they progress through the courses; 3) student interviews from EDUC 316 indicate that the course provides student teachers with a knowledge of classroom management strategies from which to choose and that student teachers are being reflective about their own role as a classroom manager in a given teaching situation, and d) better methods for measuring reflectivity need to be developed. These trends have led to several research proposals which will be initiated in the 1989-90 academic year. SIUC offers a unique situation for study in that all majors take the professional education sequence courses, thus data on large numbers of students across disciplines can be collected.

To summarize, SIUC has developed a model that has incorporated the collaborative efforts with local public schools in order to produce teachers who are not only technically sound but who also are able to reflect on their own instructional effectiveness. This model is constantly being evaluated and modified to meet the needs of the students and to include current practices and research findings. Already new collaborative efforts are being explored to strengthen the ties between teacher educators in higher education and the public schools. The commitment at SIUC is to have graduates who have been determined to be a quality beginning professional educator.

References

Collins, J. F. (1974). The making of a teaching center. *Journal of Teacher Education, 25*, (1), 13-20.

Fox, G. T., Anglin, L., Frombert, D., & Grady, M. (1986). *Collaborating: Lessons learned from experience.* Washington, D.C.: American Association of Colleges for Teacher Education.

Henderson, J. G. (1989). Positioned reflective practice: A curricular discussion. *Journal of Teacher Education, 40*, (2), 10-14.

Lanier, J. E. (1983). Tensions in teaching teachers the skills of pedagogy. In G. A. Griffin (Ed.), *Staff Development* (pp. 118-153). Eighty-second yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press.

McDaniel, E. (1988-89). Collaboration for what? Sharpening the focus. *Action in Teacher Education, 10*, (4), 1-8.

Posner, G. J. (1985). *Field experience: A guide to reflective teaching.* New York: Longman.

Rowell, C. G. (1988). Proposed new linkages/relationships to improve teacher education: Old wine in new bottles? *Action in Teacher Education, 10*, (3), 50-55.

Schon, D. A. (1983). *The Reflective practitioner.* New York: Basic Books.

Schon, D. A. (1987). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Smyth, J. (1989). Developing and sustaining critical reflection in teacher education. *Journal of Teacher Education, 40*, (2), 2-9.

Van Maren, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry, 6*, (4), 205-228.

Wildman, M. & Niles, J. A. (1987). Reflective teachers: Tensions between abstractions and realities. *Journal of Teacher Education, 38*, (4), 26-30.

Zeichner, K. M. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education, 34*, (3), 3-9.

Zeichner, K. M. & Liston, D. (1987). Teaching students to reflect. *Harvard Educational Review, 57*, (1), 23-48.

Aerospace Scientists and Engineers Emerging as Mathematics/Science Teachers--A Collaborative Model Program

Fredricka K. Reisman
Drexel University

The National Executive Service Corps (NESC), a Manhattan-based national organization whose goal is to assist retiring executives in post-retirement activities, obtained a grant from the Carnegie Foundation to survey retiring scientists and engineers, plus school districts, across the nation to ascertain the answers to two questions. First, would retiring engineers who were interested in a career subsequent to leaving their present position be amenable to entering the teaching profession as high school mathematics and/or science teachers? Second, would school districts hire them? The answers to both questions were affirmative as indicated in the report of a survey conducted by NESC and aptly entitled, *Education's greatest untapped resource: Second career scientists and engineers.*

This survey was initiated partially to answer a challenge set forth by the Carnegie Commission Report, *A nation prepared: Teachers for the 21st Century.* The report states that there is a severe shortage of qualified mathematics and science teachers in our nation's schools at the secondary level. Unless this problem is resolved, its damaging effect on our future as a leading technological country may be irrevocable. NESC, as well as a number of institutions of higher education, believe in addressing this problem by preparing competent, committed, and content-knowledgeable educators for the classroom. NESC's goal is to draw this pool of content knowledgeable educators from retiring engineers and scientists who are able to bring real-world, technological applications to the classroom experience. This is not always the case with instructors who have gone through traditional undergraduate teacher preparation programs and who have little opportunity to develop a real world applied experience base. Later in this paper a profile of the first cohort of GE engineers is presented that describes their work experience. The applications they bring to teaching mathematics and physics are very helpful in making these subjects more meaningful to the students.

Selection of Collaborative

The Mathematics-Science Directorate of NESC, after an exhaustive review of corporations and universities, proceeded to identify collaborative groupings which would be receptive to this innovative and challenging idea. They chose as one of their first participating members of this cadre, the Aerospace Division of General Electric (GE) located in Valley Forge and Drexel University in Philadelphia. There

were a number of reasons for selecting GE and Drexel. In regard to GE, the Aerospace industry was slowing and this program provided a next career path for those electing to retire. Drexel University, an urban technologically oriented university which certifies teachers only in mathematics and the sciences at the secondary level, was selected from a number of colleges and universities interviewed in the Delaware Valley as the teacher preparation member of the collaborative. Rationale for Drexel's selection included: the design of the Drexel program in terms of its viable Intern Certification route, the collaborative and cooperative attitude that Drexel presented, the fact that Drexel did not request project start-up funds in addition to tuition reimbursement, Drexel's reputation as a technological institution, and coincidentally, the university from which hundreds of GE engineers have graduated.

Dialogue occurred between NESC, Drexel, and GE to develop guidelines for operating the program. It was determined that GE would pay for the full tuition and books for any interested employee nearing retirement and that Drexel would provide the instruction on-site at the GE facility in Valley Forge for no additional cost than for its on-campus programs. Drexel's liaison from the Pennsylvania Department of Education (PDE) subsequently was involved to provide input from PDE and to help trouble-shoot matters of certification in regard to deadlines, specific standards, and procedures.

Recruitment

GE announced a reception for interested employees in its in-house newsletters to publicize the developing teacher certification program, its purpose, goals, and expectations. The reception was hosted by GE at a hotel near the aerospace installation. Philadelphia was unexpectedly hit with a major snow storm that evening. Travel time took over an hour for what ordinarily should have been a 15-minute ride. The University President and Vice President for Academic Affairs arrived two hours late from Philadelphia--normally a 25-minute drive even with heavy traffic. A sumptuous buffet was presented and, in spite of the weather, everyone there enjoyed the food and drinks, the attention that GE had lavished on this project, and the formal program which included membership from GE, the University, NESC, and the Pennsylvania State Department of Education. A videotape was shown in which Senator John Glenn, who is a member of the NESC board, spoke to the interested GE members via a taped dialogue with the former Drexel President pointing out the contributions that these retirees could make to today's students and expressing his whole-hearted support of the proposed program. Drexel's Director of Teacher Preparation then described the required

course work involved. Following this portion of the program, representatives from PDE and local School Districts explained certification requirements, job prospects, and salaries.

The reception yielded the first group of corporate teacher candidates in the Drexel/GE/NESC collaborative program. This group consisted of 14 executives and senior engineers from GE's Valley Forge Aerospace Division and GE's Philadelphia Re-entry Division. All, except one, of these prospective teachers wanted certification in mathematics and/or physics. One was eligible for elementary education certification.

The Students

The members of the first cohort all worked on the space program. For example, one has worked at GE since 1960. He was a quality control engineer on the Titan missile project and was the manufacturing manager for the Minuteman and MX missile projects. He has been in charge of up to 100 engineers and scientists developing the tools, plant facilities, and test equipment for these projects and is currently manufacturing coordinator manager on the Minuteman Missile Project involved with the re-entry system. Overall, a wide variety of backgrounds and abilities was present among the candidates.

GE cohort certification candidates possessing engineering degrees usually satisfy Pennsylvania content requirements for becoming certified to teach high school mathematics. The civil engineers' course work and work experience match nicely with the requirements for certification to teach Earth and Space Science. The electrical engineers' previous academic preparation and work experience mesh with certification requirements for teaching physics and mathematics. The chemical engineers' academic backgrounds provide a foundation for teaching chemistry, and with a few additional content courses, they may also become certified to teach mathematics.

The Teacher Preparation Program

Drexel University's Teacher Preparation Program is designed to address challenges put forth by the Carnegie Report, *A Nation Prepared: Teachers for the 21st Century*. A major goal of the Drexel Program is the preparation of teachers who will have in-depth knowledge of their subject and be able to integrate applications of the content into their instruction.

The Drexel Teacher Preparation Program is in its fifth year at the undergraduate level and its first year at the graduate level. It is a non-college of education,

non-department of education, discipline-based teacher preparation program. Certification is offered in grades nine through twelve mathematics and the sciences at the secondary level, and in Kindergarten through grade six at the elementary level. Drexel's Elementary Education program also emphasizes preparation in mathematics and science which are historically Drexel's strengths as a noted technological university. The program is housed in the College of Science. There is emphasis on a balance between content and pedagogy with the weight toward content. Students at both the undergraduate and graduate levels are mainstreamed and compete academically with students in the Colleges of Science and Engineering; there are no special sections of undergraduate mathematics, science, or humanities courses for the teacher preparation majors. The program emphasizes problem-solving in addressing pedagogical issues in contrast to requiring a myriad of overlapping methods courses. There is a strong liberal arts perspective to the teacher preparation curricula. The philosophical and academic setting within the College of Science fosters the mathematics and science emphasis of the teacher preparation curricula.

Certification

Drexel's Graduate Intern Certification Program is a graduate degree program where individuals already holding a Bachelor's degree may earn teacher certification in secondary mathematics and/or the sciences. This graduate program requires that a candidate's undergraduate major be in an area that is related to the teacher certification specialization which the candidate desires. For example, those who majored in mathematics usually satisfy the state standards for teaching mathematics, while physics majors usually have the content for teaching both physics and mathematics. The requirement was designed to certify candidates possessing mathematics and science content in the shortest amount of time. Teachers in the State of Pennsylvania are required to be certified before being allowed to teach in a public school. All candidates for certification must meet the following requirements: 1) be of good moral character, 2) show a physician's certificate stating that the applicant is neither mentally nor physically disqualified from successful performance of the duties of a teacher, and 3) be at least 18 years of age. There are three types of instructional certificates as follows:

Instructional I Certificate. This certificate is valid for six years of teaching in the area for which it is endorsed. It may be converted to an Instructional II Certificate which is a permanent certificate as described below. The Instructional I Certificate may be issued to applicants who: 1) possess a baccalaureate degree, 2) successfully complete a PDE approved teacher certification program at an institution of

higher education within Pennsylvania, 3) present evidence of having passed the Pennsylvania Teacher Certification Testing Program (PTCTP) comprised of Basic Skills.

Intern Certificate. PDE may make a one-time issuance of an Intern Teaching Certificate, for a time not to exceed three years, while the candidate completes an approved certification program.

Instructional II Certificate. This is a permanent certificate issued to those who have completed (1) a PDE approved induction program whereby an experienced faculty member is assigned to mentor a beginning teacher during the initial teaching year; (2) three years of satisfactory teaching on an initial certification; and (3) 24 post-baccalaureate semester credits.

The Graduate Intern Teaching Certificate Program for elementary education certification is available to those with undergraduate majors in the humanities, business, and the arts. However, they must satisfy the state certification standards which involve studies in such courses as American History, Economics, World Geography, Biological and Physical Sciences, and Drexel's mathematics requirement of a minimum of pre-Calculus.

(Here the author described the sequence of procedures to obtain certification distributed to each Drexel student in the Graduate Intern Certificate Program.)

Drexel's Graduate Intern Certification Program requirements consist of five courses of pedagogy, content courses necessary to satisfy PDE standards, and a successful Field Experience in a secondary mathematics or science classroom. The Field Experience is a ten-week supervised experience whereby the prospective teacher is placed for three hours daily in a classroom with a strong practicing teacher in the same certification area under whose tutelage the Drexel student teaches. Drexel provides a voucher for one graduate credit (presently worth $350) for the cooperating teachers.

The curricula and activities of the Teacher Preparation Program incorporates the following characteristics:

* rigor and depth in content;
* mainstreaming Teacher Preparation Program students into regular, rigorous mathematics and science classes at Drexel--not a separate track, e.g., "mathematics for secondary teachers";
* diagnostic teaching emphasis;
* integration of technology--especially computing--as instructional tools;
* emphasis on communication skills;
* comprehensive field experiences in educational settings including interaction with K-12 students;

* a paid six-month industry co-op in an industrial setting related to the student's certification area;
* minimum methods courses;
* creative problem-solving focus;
* collaboration with schools re pedagogy, i.e., appointment of adjunct master level educators to model instructional strategies;
* collaboration with the Philadelphia Renaissance in Mathematics and Science (PRISM) to enhance middle grades science teaching, e.g., Drexel collaborated on an NSF grant awarded to PRISM --$675,000 over three years;
* commitment to the recruitment of minorities and women into teaching mathematics and science at grades 9-12, e.g., the program received $100,000 PDE 1988-89 grant to recruit minority students into the Intern Certification Program;
* commitment to the recruitment of minorities and women into teaching at grades K-6;
* recruitment of those with a baccalaureate degree in mathematic or science who are ready for a career change and who wish to obtain certification to teach in grades 9-12.

Knowledge of Teacher Preparation Program by Administrators and Faculty

The Director of Teacher Preparation works closely with the Dean of the College of Science and has easy access to the President, the Vice President for Academic Affairs, and the Vice President for Research. The dean is closely involved with all phases of the Teacher Preparation Program including curriculum development, recruiting, and integrating expertise of the Teacher Preparation faculty into improving instruction within the College of Science. The Director of Teacher Preparation is a fully recognized member of all College of Science Committees including curriculum, tenure, and search, and meets regularly with the other department heads within the college. College of Science academic faculty and department heads in each of the disciplines are continually involved in curriculum revision of the Teacher Preparation Program as a result of the formative evaluation process. Programs in each of the certification areas have undergone fine tuning over the last year in particular, in consultation with academic faculty in the College of Science and Civil Engineering in the College of Engineering. Thus, there is a continuing and easy flow of information about the Teacher Preparation Program to the other departments, especially within the College of Science.

Program Goals

The GE students in the Graduate Intern Certificate Program as well as all other Drexel teacher preparation students take five pedagogy courses for secondary certification and six pedagogy courses for elementary. The five core courses that both elementary and secondary certification candidates take include Professional Studies in Instruction, Diagnostic Teaching, Evaluation of Instruction, Multimedia and Instructional Design, and Current Research in Curriculum and Instruction. The additional course for elementary certification includes Language Arts Processes. These courses build upon students' knowledge and expertise in science and mathematics.

The goal of the program is two-fold: to prepare cohorts of qualified mathematics and science teachers who will bring to their students a richness of theory and practice, and to offer those who wish to move to a next career an opportunity to pass on their knowledge and expertise to future generations through teaching.

Thus far, the first cohort of GE retirees have completed course work requirements for their Intern Teaching Certificate. Eleven have graduated. Two dropped out and one died of a heart attack. End of course evaluations have been consistently positive. Two of the eleven have completed their field experience, and two more are expected to complete theirs during the upcoming fall quarter. They have taken the Pennsylvania Teacher Certification Testing Program and have passed these tests which are required for Pennsylvania certification.

Of the remaining seven GE engineers in the first cohort, one has changed companies after a lay-off from GE and probably will not be ready to teach for two to three years; the others are on staggered schedules ranging from one to five years before they will be ready to enter their second careers as teachers.

Challenges and Solutions

One problem that occurred resulted from the nature of the work which require members of the GE cohort to travel across the country as well as overseas. They were concerned about missing classes. This was solved by audiotaping each class and ensuring that another member of the class shared handouts and explanations of class activities, creating an archive of class activities for review.

A second problem was the distance of the retirement from course work. Plans are underway to obtain funding for a computer simulation on pedagogical principles which they learned that they may review until they enter teaching.

A third problem involved the timing of the Field Experience. Usually this is possible during the time between retirement and entering teaching. In one

instance, an individual's job terminated unexpectedly, and he needed to enter teaching quickly. He had two options. Option one was for the student to obtain a full-time teaching position. Drexel would then provide supervision during the first twelve weeks. The second option was to enter a long-term substitute position which could serve as his Field Experience with on-site supervision from Drexel.

Institutional and corporate challenges, such as waiving late fees for those who missed university registration deadlines and income tax questions concerning their tuition remission, were handled by members of the collaborative. The friendships and collegial cooperation that emerged from this project represent the spirit of the endeavor. University and corporate policies were modified and created where necessary to accommodate the needs of "our guys." In fact, a special graduation ceremony and reception was held on July 18, 1989, to present graduate certificates to these prospective teachers. The University President, Vice President for Academic Affairs, Dean of the College of Science, and Director of Teacher Preparation were in academic robes. Players from GE, the GE Foundation, and NESC attended. There was television and print coverage and articles appeared in the hometown newspapers of the men as well as a large article on the front page of the business section of the Philadelphia Inquirer. It was a wonderful culmination to an exciting and successful collaboration.

The greatest challenge now is to facilitate the move from the top of the corporate ladder to the beginning teacher role in their new career. The field experience proves to serve as a viable transition along with continued university support and the PDE mentoring induction process.

A second GE cohort of eleven are beginning their third course Fall quarter. Plans for recruiting a third group have already begun with the first member of that class having already been interviewed.

Other members of the AACTE Panel included:

Robert Cooper, Vice President
National Executive Service Corps

L.B. Gunnells
Second Career Teacher

Joy K. McCabe, Manager
Aerospace College Recruiting Programs

Theona Waxbom, Higher Education Associate
Pennsylvania Department of Education

Summary

This chapter has presented some traditional and some unique models of successful collaborative programs in the arts, the sciences, teacher preparation, school/university partnerships, and other arrangements. Each program is unique; yet each share some common characteristics. For one, most successful collaborative programs do not have large, complex hierarchial governance structures and formal contractual agreements. In fact, some collaboratives begin with little extended planning and few formal meetings, proceeding with some vague goals. It is during the course of the collaborative project that some features emerge leading to joint ventures benefitting schools.

Among the commonalities evidenced in the model programs described earlier are:

* Early on, a common agenda emerges and a consensus is reached on the realistic substantive goals of the project. More than just the agreement to cooperate, collaboration is the topic of meetings and work sessions; an action agenda is agreed to with specified tasks for the various parties and a communication system.

* A firm commitment to collaboration is made by all parties and principal players. This is reinforced by ceremonies, rites, and rituals arranged by the staff; for example, banquets, certificates of achievement, informal socialization practices.

* A small group of activists representing the collaborating institutions keeps the flame alive by agitation, talking to decision makers, showcasing project events, and other actions.

* Staff and initial participants have a desire to gather information, discuss events, and learn from their mistakes while having the internal fortitude to feel comfortable dealing with high levels of ambiguity.

* The management of the project and the attendant liaison persons are able to provide a large measure of flexibility, to bend bureaucratic rules to allow the project to accomplish some model start-up activities which the participants find novel and provides them with security, status, and sociability.

In the introductory chapter of the book, the collaborative mechanism was viewed as a form of transactional organizational management featuring parity among participants, communication and liaison at all levels of the cooperating institutions, and negotiation as the chief program operating mechanism. Clearly, the model programs described in this section again demonstrate the validity of these characteristics.

Chapter Six
Concluding Remarks

Henrietta S. Schwartz

The symposium which is the heart of this chapter featured a group of the most respected scholars in the field of education generally and teacher preparation specifically. It is only fitting that the concluding section of this volume on collaboration feature Ralph Tyler, John Goodlad, and Lee Shulman being questioned by Louis Rubin. The lively discussion and point-counterpoint virtuosity was a stimulating and mind-altering way to end the conference.

If collaboration, in the ways in which it has been described and analyzed in this volume, is to be more than a passing fad to be revived again in two decades, then staying power must be built into the theory, research, and model programs established by this current interest. If these efforts are to have widespread impact on the schools, the preparation of education professionals, the knowledge base, and the commonweal, then long-term commitments of time and resources must be made. Much of what will be done in the name of collaboration will not be glitzy or attention getting in the same ways that some of the programs described earlier are, but will consist of bringing the talents and resources of the university, schools, and the community to bear on the education of the young.

As indicated by a panelist, we do not know how really exceptional some collaborative efforts are in the same way that we have not celebrated the wisdom of the practitioner in the classroom. We have not systematically documented good teaching or successful collaborations. Without this notation, how can we develop principles, theories, concepts of collaboration, codify our knowledge, and develop ways to transmit this information? We do not have enough systematic information to replicate our most successful programs. Even where the research is good and the findings sound and generalizable, we question the applicability of our scholarship. The panelists help us clarify what we need to do to sustain the energy and enthusiasm marking this conference. As Ralph Tyler says:

> If we understand what is required to do that (collaboration), we must help other people go through the same processes of thinking and acting that we've done. . . but unless they go through that process of analysis, it is superficial.

The danger always is that movements come along and pass along. The conversation which follows should help fix the important elements of collaboration in our minds and spirits.

Featured Symposium
Froth, Tinsel, and Substance in Teacher Education

Louis Rubin
University of Illinois at Urbana-Champaign

Lee Shulman
Stanford University

John Goodlad
University of Washington, Seattle

Ralph Tyler
Director Emeritus, Center for the Advanced Development of the Behavioral Sciences, Palo Alto

(The symposium starts with Dr. Louis Rubin speaking)

The somewhat impish title, "Froth, Tinsel, and Substance in Teacher Education," has to do with what's empty air, mixed with a bit of foam, what's merely decorative, and what's genuinely significant. To paraphrase, you might say that the session deals with the good, bad, and meaningless in teacher education.

The panelists, for those of you who don't know, are Ralph Tyler, John Goodlad, and on my right, the inestimable Lee Shulman. I'm going to ask six or seven questions of the panel; we'll throw it around, but we want to allow time for the audience to bait Dr. Goodlad or ask a particular question of Dr. Tyler, or do something with Lee Shulman, whatever your pleasure is.

Let's begin. Are terms like "empowerment," "site-based management," "school restructuring," and "clinical teaching" empty phrases or do they give promise of authentic improvement? This is not the first effort to revolutionize teacher training, and this time are we on to something real or is it more much ado about nothing? Lee?

Lee Shulman

I think we're onto something real, but it still may turn out to be nothing. The ideas, I think, are sound. I think they're timely. I think they're even internally consistent, which is remarkable for our field. What's also remarkable is that the sets of ideas are remarkably congruent across traditionally warring parties.

It may still not to work because the system is so dependent, one part on another. You can't just change a little piece of it; you have to change it all, and it's extraordinarily difficult to do. While the idea is sound, will it work? I don't know.

Louis Rubin

John Goodlad, let me put a question to you. There are places in Virginia and elsewhere where kids must go to the bathrooms in pairs to avoid assault, attack, and rape; where hand metal detectors and dogs are used to curb drugs and to intercept weapons; and a number of instances in which semiautomatic guns have been found in the bookbags of junior high school kids. Has teaching become a dangerous profession and thus lost its rightful share of human talent? Can we still hope to achieve great talent in teaching?

John Goodlad

There are two sides of what you're talking about. First of all, I think the illustration you're using very clearly demonstrates the major failure of educators to take advantage of the greatest resource they have for educational reform. And that is that the young people are completely left out. They're left out in the teaching act and they're left out in the reform of schools. In the study of schooling, I was in a school very much like what you're just describing, and no one had ever asked those kids what to do about getting a good education. According to our data, the high school students said that they weren't getting a good education. Nobody was asking them how they would go about reconstructing their school environment in order to make it a place where the youngsters could learn.

Paralleling that, if you look at Sarah Lawrence Lightfoot's book (her first case study on the Atlanta Schools), she talks about these being good schools. They had advanced to a point where learning might begin to occur. There was an enormous amount of involvement in that situation. We have neglected the most powerful resource (the students). I've worked in a school for delinquent boys where there were murderers, etc. In that setting we discovered that if we involved the youngsters in regard to the nature of their environment, (things happened). As we've learned from studies of gangs, you turn that power to more constructive things, and reform is not at all impossible.

Louis Rubin

As perhaps the oldest person in the whole meeting, I want to ask Ralph Tyler to act like a historian for just a moment. You've been around the block several thousand times. You seem to have an incredible resistance to retirement. I once asked Ralph what's the right time to retire. He said, "about two weeks." That's his approach to the world.

Let me ask you, from your perspective of the past and the present scene, do you think we are repeating mistakes of the past? Are we once again living past folly? Or do you think we are doing something sensible?

Ralph Tyler

I think we confuse ideas, the things that guide us as to what we ought to become, with the question of what is our next step in improvement. Because we can't get to that ideal from where we are, people will start and then they finally give up.

Furthermore, we don't recognize that there are wide varieties of schools, different kinds of children, backgrounds, conditions, different resources. We cannot talk about ideal things here without raising the question, what is my school like and how can I help improve it? My experience in the 77 years that I've been involved in education has been that you need to identify what it is that can be done in your own school, what resources you've got, what steps are next.

For example, the area around Los Angeles is going to require some 9,000 new teachers in the next few years. They're not going to be able to draw upon the whole nation; they're going to have to draw upon areas around here. What are the resources? Who are the kinds of people that are in this area that can become good teachers? We tend to look for people who already have acquired these skills, rather than looking at the people who have the interest in it and are concerned with children. They've worked with children, they want to be teachers, and we should try to help them acquire the necessary background.

We emphasize the intellectual component, rather than beginning with the emotional component--to care for children--and then help them develop the intellectual area. My experience is you start with the particular school, not with the general notion, and try to see what can be done step by step to improve it.

Louis Rubin

The Holmes Group recommendations and others call for reform in teacher preparation, pressed for the elimination of the undergraduate teacher education major and for a very heavy emphasis on liberal arts studies. In point of fact, however, higher education has its own mystique. Is it possible that promotion requirements, scant dollar resources, and the longstanding disinterest among academic liberal arts professionals in teacher preparation will constitute an insurmountable obstacle? Will Holmes succumb to complacency and resistance? Or does it have a chance?

I think a problem we've got here--and it's related to the Holmes Group question in part--is that we in teacher education, increasingly I find, are like folks who run a supermarket in which milk is one of our biggest sales items. The people who deliver milk to us are consistently delivering this sour milk. So we're changing our advertising to make it sound like that's what we wanted to sell all the time cause we're too wimpy to turn back to the people who are selling us all this milk and to say, "Will you stop shipping us this junk and do your job if you want us to do ours."

Put another way, the Holmes Group and others are saying that there's an institution out there called the university which has the responsibility for preparing people in the domains in which we are then going to prepare them to teach. When we get those folks, they cannot answer a kid's question of the sort, "But why do I invert and multiply?," even though they've got As and Bs on four math courses. Yet, we're much too wimpy to turn around and try some leverage of some sort to get the folks in the arts and sciences to start doing their job responsibly so we can begin to do ours. What if they don't see their job as teacher education? I am here to inform the young about science, or about mathematics, or to explain Picasso.

Lee Shulman

If we stopped admitting their students to our programs and did it consistently, and their students began to do what students do when they don't get what they want, I think they'd begin to get the message. We've got to start doing something else. The Holmes Group is just an attempt to do that, it's an attempt to say we need better preparation in the arts and sciences. The mistake the Holmes Group is making is thinking that if they do a schlock job in three years of preparing our students, they'll do a superb job in four. Well, it won't happen.

John Goodlad

Not only in that area, Lee, have we been limp. If you go back 100 years in teacher education reform reports, to 1892, and read all the reform reports since then, as we've done, you find the following. First, what teachers need is more general education, second, we find that the teacher should have an academic major. When you ask the question as we did, "What about elementary school teachers?" the answer is, "Oh, I hadn't thought of that." Third, fewer of those Mickey Mouse courses in education, relatively unchallenged, and fourth, more mentors. Most of the alternative teacher education programs being proposed now are to mentor new teachers.

If teachers teach the way I describe them in that book, why do we want to mentor people with them without any other questions of the kind that inquires into that mentoring process? So we've had those same recommendations for 100 years, largely unchallenged.

Louis Rubin

Education does not suffer from a lack of critics or professed saviors. Many of those who have given us advice are unbelievably pompous. Among the developed nations of the world, our country ranks 19th in infant mortality. Our childhood poverty rate is two and a half times that of most other industrialized nations.

Teenage pregnancy in the United States is the highest of 30 developed nations. In short, we seem massively unconcerned about children's welfare. We've been on a toughening up schooling kick recently. There is more and more evidence that much of learning failure may be rooted in the social scene. So my question is, "Should the school, in your judgment, be involved in social service and thus take time from academic, or should we simply say our job is to teach and we can't do society's work?" In short, can the schools be expected to cure social ills?

John Goodlad

I think before you made that last statement you presented two alternatives and I think I have not accepted either of them. That is, that it isn't an either/or question at all, but it is becoming increasingly clear that the school, with the portion of time that it has, is indeed a social agency, and it's a social educational agency to work in collaboration with many other agencies over a 24-hour a day span. What we have done is to talk about adding a lot of these other service functions to a five-hour or five-and-a-half hour school day, which is completely unrealistic. It is clear that the school cannot rectify many of the kinds of problems you're identifying now and the ones you identified earlier, all by itself. If a youngster is in a third-generation poverty-level family, that isn't something that a school turns around in a short course of time. If a youngster moves three times during a year, and this is not a youngster necessarily from three generations of poverty and not necessarily a youngster declared already at risk, the chances are after three moves that youngster academically is at risk. Many people are beginning to realize that all of this goes back to a stabilizing in the community, particularly an economic stabilization of the community. Clearly, the school becomes a pawn in all this.

But on the other hand, that does not excuse the school for saying, because of these conditions we can't do our job. And I think one does one's job and says, because of these conditions, this is what we have to do, rather than because of those conditions we can't do anything. But then to try to assume that we can do it all, or for society to conclude that, is quite erroneous.

Ralph Tyler

If the people in the school understand that the total environment of the child determines his educational achievement and that the responsibility rests in that community, then some people, laymen, are interested in taking the responsibility and the leadership for improving the home and community environment themselves. I don't think the school people should take the full responsibility; I think parents and other interested people can help. One of the things that has helped greatly to relieve teenage pregnancy is to provide supervision for children after school hours.

In New Mexico, I found several communities in which foster grandparents were taking care of children after they got out of school when both parents worked. They had greatly reduced the teenage pregnancy when there was supervision of their after-school play. If you consider organizing the community to be the best environment for children's learning, instead of thinking only of your schools, find out who can do what. One of the most available groups of people who are not heavily engaged are those who have retired, and they are anxious, many of them, to do things that are important.

Harold Richmond, Professor of Social Services Administration at the University of Chicago, has developed a map of Illinois which in every community he shows the resources for children that are available there. The map is used by groups, like the Congress of Parents and Teachers, in the area to develop other communities that have these resources to help children.

Louis Rubin

Now, much has been done in the way of identifying a central knowledge base for teachers. Indeed, AACTE, in collaboration with Pergamon Press, baptized an impressive new volume on the topic of this annual meeting. Lee, you've been one of the heroic figures in this arena, you've made a very substantial contribution. Let me ask you, "Will the implementation be infinitely harder than the recipe?"

You've set down, or helped to set down, a knowledge base. That's one thing. Transferring that knowledge base into a curriculum, seeing to it that it's taught with the proper pedagogy; making sure it coincides with the real world of schooling is another ticket.

Lee Shulman

We're in danger all across the country in using the wrong strategy for trying to get the notion of knowledge bases implemented. And just a word about knowledge bases. I think if you read the AACTE volume, and read it carefully, it will disabuse anyone of the notion that knowledge base is some sort of unitary, monolithic idea. Here are the 1,000 gems on which the entire practice of teaching rests. It's a much more complex and subtle notion, which leaves open a great deal of variation, a great deal of diversity, in its implementation among educators.

The thing I worry about is this. If you look at the way in which across the country now people are trying to implement concepts of what everyone ought to know--and I don't just mean in teacher education--what you see is an extraordinary lack of trust in those who are doing the educating, and an enormous rise in suspicion among policy makers, citizens in general, about whether the educators can be trusted to do what they say they're going to do. Just several examples: in

California, there's no doubt in anyone's mind that part of the knowledge base of teaching is being able to read and write and use mathematical ideas competently. Let's set aside what competently means now. There's no question but that's a responsibility of all educators in colleges and universities, to prepare people who can read and write and calculate. So what does California do with people who hold diplomas with Bachelors degrees from accredited four-year institutions in California? It makes them all take a test called the California Basic Education Skills Test, and if they can't pass that test it doesn't matter how many educators have attested to their competence, they can't get into or out of a teacher education program.

The same thing is happening everywhere. It's not just California; it's in nearly every state. And it's not just for teacher education programs. Many states, even though a kid gets a high school diploma, will not permit the kid to graduate unless he or she passes an external examination.

The sort of work I'm doing now with a voluntary national board in one sense contributes to what I fear is a terrible distortion--namely, we're prepared to define what people ought to know. But we are not prepared to trust the educators who are supposed to teach those things and their judgments of quality. We erect larger and larger and increasingly bureaucratized systems of external examination, which do two things. One, they further erode the trust in the educators. Two they lead us who do the education to feel less and less responsible to do the quality control ourselves. Why should we bother carefully to assess and monitor and document what students going through our programs are really learning, and exercise real quality control within the program, if the state or somebody else is going to insist on testing them all again anyway? So you get a vicious circle.

Louis Rubin

Suppose someone doesn't do very well in learning the essential knowledge base. But out in the field, because they are quick, they're very clever. They somehow become wonderfully skilled in the classroom. They don't know the theories, they couldn't pass a test on the essential knowledge base, but they can teach like whiz. Do they deserve to stay?

Lee Shulman

The question presupposes that your way of measuring whether someone, "has the knowledge base," does not include an assessment of whether they teach well. As long as that's the case, we've got a stupid way of measuring what people know. We must build into any measure of whether people have, quote, acquired the knowledge base. What's teaching? Teaching is a form of practice. The knowledge base of teaching, in order to be assessed, requires that you assess

whether someone can engage in practice. If there are bodies of theory that don't help people practice, so much worse for the bodies of theory.

Louis Rubin

They once asked Michelangelo, "How do you carve a horse?" He said, "How do you carve a horse? It's easy. You get a block of wood, you look at it, and you cut away the part that's not the horse." Lousy teacher; great sculptor. So he could do it, but he couldn't explain it.

John, you pioneered for the last 30 years or so in school/university collaboration. AACTE's 1989 theme, the year of your ascent to the presidency, is collaboration. Is it an impossible dream? Consider: True collaboration requires a melding of theory and practice. It requires connective tissue between what fine teachers and administrators do and what research findings suggest. While there certainly is a body of a common ground, could major contradictions exist?

John Goodlad

Between the collaborating parties?

Louis Rubin

Yes. That is, the culture of the university and college being such that it is antithetical to genuine collaboration with schools and a massive resistance on the part of schools to view the academics from the universities as saviors.

John Goodlad

If one takes insights from the way it's been, elements of collaboration would appear to be antithetical, but I don't think it ought to be so. We're back into what is and what ought, which was discussed a little earlier on.

Just taking the first part of your observation, it is always rather astounding to me that when an idea in our field suddenly gets popular, we find how quickly we are able to report on something we were not doing two or three years ago. It only suggests to me that conferences provide a marvelous forum, for people saying what they'd like to do, rather than a forum you can trust in regard to whether or not they're doing it. What I'm really saying here is that it's nice to think of the collaboration between university and the schools. I happen to believe, as I said on this videotape, that schools of education ought to have a responsibility for the educational health of the community. To say that the health of the community is not our responsibility would be comparable to a school of public health saying we have no responsibility for disease control in the community.

I think what's embedded in your question is more whether or not we can do it. It is going to be very, very difficult. If some of you out there have not yet attempted to work in a truly collaborative project where the university people are not merely gathering data for research, or are not telling about their research, which they like to do, but rather are engaged in an area where there are overlapping self-interests, and those self- interests can only be met by satisfying the self-interests of the other parties, that creates an agreement that is as difficult to fulfill and as easy to break as a marriage between two people. And that's what we're finding out.

After working now for a number of years on 14 formally organized such partnerships in 14 states, I could tell you that it's three steps forward, two back; one step forward, three back. I've been working in one of these partnerships now for three years, simply trying to get the university people and the school people to stick to a commitment that they made in my presence. By the time I get home and back in the office, the chairman of that governing board is calling me and saying, "John, can you come back?" It is very difficult.

It seems to me that the most obvious area for collaboration is the education of educators. The teachers want better teachers; the university has a responsibility for educating them. As I said in that video, you can't get a better teacher if you don't have a good setting in which to educate that individual. Yet we're finding in our research that the teacher education faculty doesn't dare challenge the practices in the schools because if they do, the schools won't take the student teacher back. I interviewed thousands of students last year and asked if there is any dissonance between what you're learning in your teacher education program on campus about the teaching of reading and what you have to do out there as a student teacher. The answer was almost invariably, "Yes." I said, "What do you do about that dissonance?" The students looked at me as though, "Well, dummy, I do as the Romans do." And then I ask them, "What do your professors think about this?" "They tell us to do as the Romans do. When you finally get your own classroom, do it the way we're teaching you." If that's the case, why do we have student teaching at all?

When I raise the question, "We've taught reading since the beginning of time with a slow group, a middle group, and a high group. They don't do it that way in most of the rest of the world. Do you talk about that with your student teacher and the cooperating teacher?" "Oh, no, we couldn't do that. This teacher would never take my students back."

Do you ever raise the question as to why in this country and not in many other countries, when we go to the mathematical operations it's 2+2, 6+6, 12+12, 322+426? We do that for months and years before we subtract them. And then we go through it in fractions and then we go through it in decimals. In other

countries, they--1+1, 1-1, 1X1, etc. What I'm saying is, this confrontation that has to occur is very, very difficult to get into and if you don't get into it, we aren't going to change anything.

Louis Rubin

You seem to have an uncanny ability to do the right thing at the right time. You have an impeccable sense of timing. You have seen fit at the present moment of time to embark on yet another major new program which you will do with as much consummate skill as you've done in the past. The new program is the education of educators. Is it not so that the exact same problems still exist and continue to exist in the period ahead? Can we defeat the enemy in that regard?

John Goodlad

Yes. That's exactly the same answer in relation to teacher education programs and schools of education. When Ralph was chairman of the Department of Education at the University of Chicago, the field of education was barely coming into its own. In order for that field to be defined within the university setting, it was necessary to do certain kinds of things at that time which had to do with emphasizing scholarly work within the university setting, where in education we had not done that. The field was new.

When I was Dean of the Graduate School of Education at UCLA, the message to me was very clear. That is, bring the School of Education into modern times in regard to its scholarly work or it isn't going to be here. UCLA was looking for its place in the sun as a scholarly institution.

Now, I think we're faced with a different kind of problem. I think we have demonstrated that we can be just as scholarly in a field that's probably more important than most of the fields within the university community. I think that we have got to respond to a different drumbeat, and that is, we have done exactly what Dewey warned us not to. We've cultivated very carefully the ways of the academic disciplines in regard to our existence. We have not cultivated the ways of the professional schools. In 1902 or 1903, in the second yearbook of the National Society for the Study of Education, John Dewey said, "As these new schools and colleges in education emerge, look to the other professions for your lessons and not to the arts and science departments." When I defended my colleagues for promotion at UCLA, I defended them against the criteria of the arts and sciences. Now I think we've got to introduce the criteria of the profession. In the University of California, the major professions already have established those criteria. The schools of education have not.

Again, we've been limp, and I would use an example. In an interview with Michael Heyman, the Chancellor of the University of California at Berkeley, I asked him a question about what he had hoped would be happening in the School of Education five years after he had saved it by a letter that we all looked at with great interest. I said, "Is the School of Education doing what you wanted to do, what you had in mind?" He said, "It is in the right direction." I said, "I sense a hesitation in your voice." And he said, "Well, frankly, I would like to see those education professors messing around in the schools more." I said, "Mike, if they did, they wouldn't get promoted." He said, "Wait a minute. I came up through the Berkeley UC system, but I was a professor of law. When the academic committee examined my credentials, they asked what a professor of law was supposed to do and we told them what they did and we gave them the criteria. I've been chancellor here for quite a few years and I haven't got the faintest idea what the criteria are by means of which a school of education should and its faculty should be evaluated. Furthermore, I have never been told."

Again, it's back to Lee's point. We've been altogether too limp in putting ourselves forward--we've demonstrated that we can be just as scholarly, just as hardnosed, as the other professions, but there are some human criteria and professional criteria that we have to meet. If we don't get those recognized, then I think the implications for what you're saying are, we'll squeeze out teacher education in the universities.

Louis Rubin

Lee, you've been much in print of late with respect to content-relevant pedagogy and the matter of case studies. I assume what that implies is we ought to teach teachers what's most important to teach in US history, and then also arm them with specific pedagogical devices and procedures for teaching the Civil War. With respect to case studies, we ought to be able to find studies which depict actual practice at its best and use these as a vehicle for training.

Now what you hear is people saying, "Well, if you have to have special pedagogy for the Civil War, and special pedagogy for the parts of speech, and special pedagogy for each content area and each grade level, I'll never be able to get enough preparation." That's one concern. With respect to case studies, suppose they give you the wrong case, one that doesn't fit my situation. I'm afraid that the august Dr. Shulman is leading me astray. Is it possible?

Lee Shulman

There are two, I think, misconstruals in the question. One is the notion that content specificity is a matter of absolutely unrelated particulars, that simply have

to be memorized, much the way in which kids studying too much of history or science these days in the secondary school see what they're studying as a matter of unrelated particulars that have to be memorized.

There is no inconsistency between saying, on the one hand, there are fundamental principles for the teaching of science or literature or literacy, and on the other saying that our students of teaching will understand how to use those principles best if we embed those principles in sets of compelling, memorable, powerful cases. The biggest mistake we could make is to try to select an ideal case for each of those principles. What you see is the best case based teaching. In other professions, the use of multiple cases is common so that people don't have to depend on the one right case. People begin to see that as situations change, as contexts change, they begin to modify, adapt, and apply principles in different ways. There's always an n+1 case. So I think that if we were to teach these in the way which you asked the question, which I know was meant to be provocative, we would be going down the wrong path.

The other thing that I think is terribly important is that as much as possible we embed all the principles we teach in practice. Those who teach the Foundations, with a capital F, those of us who are philosophers and psychologists and other kinds of ologists, we have long prided ourselves on teaching courses that are so general and powerful we never have to link them to practice. That's such absolute nonsense. There's where some of the first kinds of modifications have to occur.

To take a personal example. One of the sorts of principles that I teach is the principle of cognitive organization, of the necessity of having well-organized preconceptions that link to what students already know and lay out a sense of what is to follow. We've been teaching information processing for years as abstract principles. Dennis Phillips and I, in a course class we taught a few weeks ago, had the students read the prologue to *Romeo and Juliet*. Why?

First of all, our principle is that we never teach foundations except wrapped around examples of practice. A quarter of our students are teaching literature. Most of them end up running into *Romeo and Juliet* before they know it. We read the prologue carefully. Funny thing about the prologue. The prologue of *Romeo and Juliet*--I don't know how recently you've read it--in about eight lines tells the reader that you're going to have a play here about a couple of star-crossed lovers who are going to die by the end of the play. And now you raise the question. How are your students going to understand the beginning of a play that gives away the end before it even starts?

We spent the next hour and a half discussing both what it meant for there to be certain kinds of plays where the drama was not in knowing how it was going to end up, but in seeing how inexorably what you knew was going to happen was going

to unfold. In fact, we call them tragedies. There was a set of psychological principles that was both reflected in how you could teach it and in what made the play so exciting.

That's content specific pedagogy, but it's also a principle teaching of foundations. I'm just trying to learn how to do that, and I think it's terribly important for all of us to give it a try.

Louis Rubin

If you look back upon your distinguished history and your many years, the economy is now problematic. Much of the reform that we're talking about rests upon substantial funding. Do you, Ralph, think that the society will put forth the funds necessary to accomplish what John wants to do, what Lee wants to do, and what others here have in mind?

Ralph Tyler

Is there anything that we've discussed that takes money?

Louis Rubin

I think it's going to take some money to retrain and retool the practitioners now in the school.

Ralph Tyler

Why does it?

Louis Rubin

Because they expect to be paid for their time.

Ralph Tyler

Well, do they have to be? The point is, do we have to establish an environment in which everybody gets paid for everything. Those who are really conscientious about teaching will pay for their own time, will go and do things in the summers. I have never found in my experience that the most important reforms can't be bought. It's nice. I'm not objecting to having money, but the notion that you've got to wait till you get money is a mistaken notion.

Most of the money we spend in education is on the salaries of teachers. Why don't we try doing something else. If, for example, teachers are going to take time off for staff development, it's quite possible in the Coalition for School Improvement in Massachusetts for parents or children to take over a class for a day or two while the teachers are doing something else. What you've got to start with is the idea that these improvements could be made with the resources you've got or else you try to get them. But don't stop doing it because you don't see how you can get money for it.

Louis Rubin

But, Ralph, in this age of "yuppydom," do you think we can rekindle the glory of the mission, get the zeal going again, and develop a kind of professional altruism?

Ralph Tyler

I think you're not attending to the fact that teachers want to be good teachers. They often spend a lot of time in their summers paying for tuition to get courses they want. They are professional people who want to help children learn and they care about children. And if they've got resources, they may need to be helped. We may get money for it--staff development--but don't start out with the idea you need to start a program or that you must wait to do something creative until you get more money.

Louis Rubin

It takes a very unusual mind to analyze the obvious. But these guys have done great. Questions from the floor?

Question

What I'm hearing in the sour milk analogy is similar to the high school teacher who said I won't take black or brown or under-achieving youngsters because they aren't prepared. I don't know if I heard you right, because it seems to me a solution might look to diagnostic teaching, might look to other models of teacher preparation. I'm in the College of Science at my university so please help me with that solution.

Lee Shulman

To repeat, the question was some concern with my sour milk analogy. Isn't that--if I can paraphrase--simply displacing the responsibility away from ourselves? Aren't there alternatives that we could employ to try to overcome some of the problems that those who come to us come with? I'm certainly not interested in displacing those students. In fact, I suspect that one of the things that we're going to have to do is to create a set of what might be called bridging courses. At San Diego State they've been working on some of those, jointly taught between people from education and the arts and sciences to overcome and integrate in response to some of those problems.

What I don't want to do is simply continue the error of accepting whatever comes to us as inevitable, inexorable, and beyond our control. As an example, when we have, as Deborah Ball at Michigan State has demonstrated in her research, people

with mathematics majors as undergraduates who when asked to explain a fundamental concept in mathematics cannot generate more than one example, one representation of a fundamental concept like the quadratic formula, there is a problem there that our colleagues in mathematics must address. I don't want to displace the problem, I want to join them in solving that problem. But I don't want them to think that because they've taught, quote, "their curriculum," it's as if now we've got the bear in our cabin and it's our job to skin it. Well, I want some help with those who are growing the bears in the first place. Did I can get out of the milk analogy?

Louis Rubin

Seventy-five years ago in San Francisco I taught music appreciation. I tried valiantly for five years to teach kids the structure of the symphony. I was miserable at it. A summer later, I watched Leonard Bernstein on television with one of his children's concerts and in 26 minutes, with incredible skill, he taught precisely what a symphony structure is. He could do it, I couldn't. In the piece you wrote, I think you used a line from "Stand and Deliver," where that marvelous teacher talks about a hole in the ground and a little pile of dirt. What about that kind of magic? Is that trainable?

Lee Schulman

Of course it's trainable. What people often don't understand, for example, about Mr. Escalante and Garfield High School is what you see if you read the book that Jay Mathews wrote about Escalante, which is--for me the most important figure in that book is not Escalante. It is the second calculus teacher at Garfield High School who doesn't teach at all the way Escalante does, who is not as charismatic. He teaches in a fundamentally sound but different way and achieves comparable results in calculus. I am not for a moment going to diminish Bernstein's genius nor the reasons why you went into the easier job of university teaching. I'm going to say that the reason we call the research we do 'studies of the wisdom of practice' is not because we stop with identifying incredibly good practitioners and celebrating their wisdom, but through studying them, we try to identify the principles we can then use, the cases we can then employ, to help those of us of more modest natural gifts learn to do similar things ourselves. I don't find those incompatible.

John Goodlad

A question asked if there is an ideal amount of time to spend in student teaching. I don't think we know the answer to that question. Certainly it's the quality of it that counts. But I just want to observe the degree to which teaching is, if you will, a

hands-on activity in the sense of the physician with hands-on activity. It's a hands-on, interactive kind of process and how little opportunity we provide for that in most teacher education programs. That is, teaching and teacher education programs demand the same kind of passivity of the students that I described in *A Place Called School.* Ernie Boyer, in his book on college, said the same thing about the college that he had said about the secondary school. I think the importance here with time is the degree to which it becomes a process of inquiry with regard to the processes of teaching. You want to place student teachers in ideal circumstances where they'll learn ideal ways of teaching. I'd rather that they saw that. Then others would say, "But shouldn't they see some of the real world, the bad things that are going on." I'm quite willing for them to see that. But I want it to be an inquiring, analytical process into whether or not that's good teaching.

What I'm concerned about in student teaching, what I have to tell you I didn't see a great deal of, is that the student, the cooperating teacher, and the teacher educator--and those two people might be one person--are engaged in always asking, "Why?" We've been told over and over that teachers in the schools don't have time to inquire into whether I do it this way or that way, they must decide. But they ought to be inquiring after the act, at least, as to why I did it that way.

I'm willing to say that there probably ought to be at least a year during which time one is active in a school situation as an intern engaged in this kind of inquiry. But I'm unwilling to say that there ought to be a month's student teaching or two months student teaching or three months student teaching; if it's lousy, more of it only probably makes it lousier.

Question

Every year we come to these meetings and we get stimulated and go home all fired up. I'm glad to do that because it's a lot of fun for all of us. But when I get back home there are a few things I really hate to do. One of them is to call my alumni and ask for money; the other one is to get politically involved. And yet I can't help but think that when we talk to each other, we are just whistling Dixie or engaged in a sound and fury exercise alone. I do believe that we're going to have to become more politically active and we're going to have to get out there and work with the general public because the education establishment simply is not going to solve these problems.

Louis Rubin

That's a lovely question. Gentlemen, can we spread the gospel you've been preaching? To accomplish these things that we've been talking about, we have to get others to come with us. Can we do that? Can we get an esprit de corps going?

Ralph Tyler

If we understand what is required to do that, we must help other people go through the same processes of thinking and acting that we've done. Unless they go through that process of analysis, it is superficial. The danger always is that movements come along. The movement in the 19th century in education, like the movement for kindergartens, was only vaguely understood. But everyone got excited. They didn't go through the study necessary to see that these were proper solutions to the problems they had. The result was that when people tried them, they didn't work very well and they quickly gave it up. There is no way by which teachers could learn to teach except by going through teaching and questioning and understanding the way we're talking about. You can't just tell people things and expect them to learn.

My father, a minister, had us every morning after breakfast read a selection from the Bible. And then he'd say, "What are you going to do about it?" The next day we had to report what we'd done. So there is no sense in talking about things if you don't do something about them.

Louis Rubin

Thank you. Let it be celebrated within these halls that we had a stimulating, electric, and informative session. Let it further be proclaimed throughout the land, especially in airports across the North American continent and in corridors in universities to which you will return, that the 41st Annual Convention of AACTE was damn good.

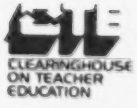
Summary and Final Remarks

This volume attempted to reflect the scope, range, and power of the presentations made at the 1989 AACTE Conference on Collaboration. It is the hope of the editors and authors that it will be useful to those who would begin partnerships by providing a series of roadmaps for those who would engage in collaborative activities. No one ever said collaborative programs were easy; democracies always take more time and effort, but consider the rewards when they work well. Collaborations are democracies in action, requiring that each participant assume responsibility for their part of the effort, acquiring rights of expression and franchise in the governance of the enterprise, and sharing in the rewards. But learning to make a democracy work requires a shared knowledge base, skilled practitioners, data collection, application, and the gadflys who ask the necessary, though often embarrassing, questions about emperors and clothes.

Almost every selection in this volume presents a listing and explanation of the various factors necessarily present in working collaboratives. It is interesting to note that only in the last panel presentation did the notion of trust emerge as an essential feature of collaborative efforts. In addition to knowledge and experience, partners in collaborative relations must trust each other. Remember, Ralph Tyler's story:

> *My father, a minister, had us every morning after breakfast read a selection from the Bible. And then he'd say, what are you going to do about it? The next day we had to report what we'd done. So there is no sense in talking about things if you don't do something about them.*

Ralph Tyler's father trusted his children to take the lesson to heart and implement the teachings in the book. The participants in a collaborative effort trust each other to do what as they say in accomplishing the tasks of the project. This book simply provides some lessons. There is no sense in talking about collaboration if you don't do something about it.



CLEARINGHOUSE ON TEACHER EDUCATION
American Association of Colleges for Teacher Education
One Dupont Circle, NW, Suite 610
Washington, D.C. 20036